

Inventn Search

TATE 09/888,997

=> d his

(FILE 'HOME' ENTERED AT 16:54:03 ON 20 NOV 2002)

FILE 'HCAPLUS' ENTERED AT 16:54:11 ON 20 NOV 2002

E AYLWARD J/AU

L1 34 S E3,E5,E7-10

L2 5 S L1 AND ?INGENAN? 5 cites

SELECT RN L2 1-5

selecting Reg #15 from citations

FILE 'REGISTRY' ENTERED AT 16:55:59 ON 20 NOV 2002

L3 47 S E13-59

SAVE TEMP L3 TAT997I/A

47 cpds in L2 citations

FILE 'HCAPLUS' ENTERED AT 16:56:38 ON 20 NOV 2002

L4 5 S L2 AND L3

5 citations w/ 47 cpds displayed

TATE 09/888,997

=> d ibib abs hitstr ind 1

L4 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:122803 HCAPLUS
DOCUMENT NUMBER: 136:177959
TITLE: Diterpenes obtained from Euphorbiaceae for the treatment of prostate cancer
INVENTOR(S): Aylward, James Harrison; Parsons, Peter Gordon
PATENT ASSIGNEE(S): Peplin Research Biotech Ltd., Australia
SOURCE: PCT Int. Appl., 120 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002011743	A2	20020214	WO 2001-AU966	20010807
WO 2002011743	A3	20020328		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2001079493	A5	20020218	AU 2001-79493	20010807
PRIORITY APPLN. INFO.:			AU 2000-9231	A 20000807
			WO 2001-AU966	W 20010807

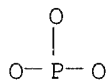
OTHER SOURCE(S): MARPAT 136:177959

AB The invention discloses a chem. agent of the diterpene family obtained from a member of the Euphorbiaceae family of plants for use in the treatment of prophylaxis of prostate cancer or a related cancer or condition.

IT **13598-36-2D**, Phosphonic acid, alkylidenebis- derivs.
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Bisphosphonate; diterpenes from Euphorbiaceae for treatment of prostate cancer)

RN 13598-36-2 HCAPLUS

CN Phosphonic acid (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



*** FRAGMENT DIAGRAM IS INCOMPLETE ***

IT **1984-15-2 15663-27-1**, Cisplatin **38937-66-5**
67707-88-4, Ingenane **67707-88-4D**,
Ingenane, derivs. **75567-37-2 75567-37-2D**,
derivs. **75567-38-3 75567-38-3D**, derivs.
82425-35-2 82425-35-2D, derivs. **210108-85-3**,
Jatrophone 1 **210108-85-3D**, Jatrophone 1, derivs.
210108-86-4, Jatrophone 2 **210108-86-4D**, Jatrophone 2,

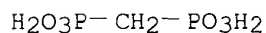
derivs. 210108-87-5, Jatrophone 3 210108-87-5D,
Jatrophone 3, derivs. 210108-88-6, Jatrophone 4
210108-88-6D, Jatrophone 4, derivs. 210108-89-7,
Jatrophone 5 210108-89-7D, Jatrophone 5, derivs.
210108-90-0, Jatrophone 6 210108-90-0D, Jatrophone 6,
derivs. 210108-91-1, Pepluane 210108-91-1D, Pepluane,
derivs.

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)

(diterpenes from Euphorbiaceae for treatment of prostate cancer)

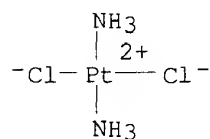
RN 1984-15-2 HCAPLUS

CN Phosphonic acid, methylenebis- (9CI) (CA INDEX NAME)



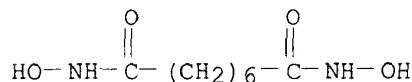
RN 15663-27-1 HCAPLUS

CN Platinum, diamminedichloro-, (SP-4-2)- (9CI) (CA INDEX NAME)



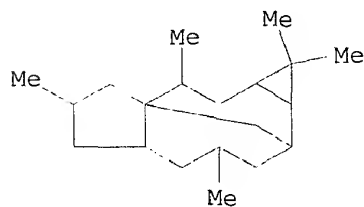
RN 38937-66-5 HCAPLUS

CN Octanediamide, N,N'-dihydroxy- (9CI) (CA INDEX NAME)



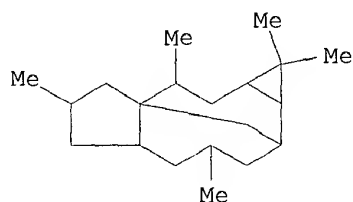
RN 67707-88-4 HCAPLUS

CN 1H-2,8a-Methanocyclopenta[a]cyclopropa[e]cyclodecene, dodecahydro-
1,1,4,7,9-pentamethyl-, (1aS,2R,4R,5aR,7R,8aR,9R,10aR)- (9CI) (CA INDEX
NAME)



RN 67707-88-4 HCAPLUS

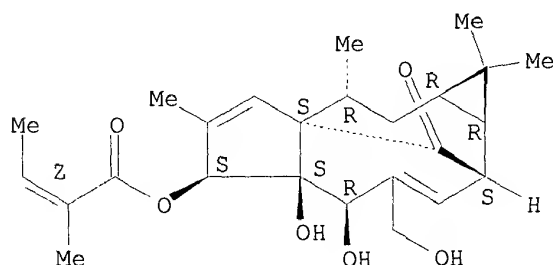
CN 1H-2,8a-Methanocyclopenta[a]cyclopropa[e]cyclodecene, dodecahydro-
1,1,4,7,9-pentamethyl-, (1aS,2R,4R,5aR,7R,8aR,9R,10aR)- (9CI) (CA INDEX
NAME)



RN 75567-37-2 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-
1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-4-(hydroxymethyl)-1,1,7,9-
tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-
yl ester, (2Z)- (9CI) (CA INDEX NAME)

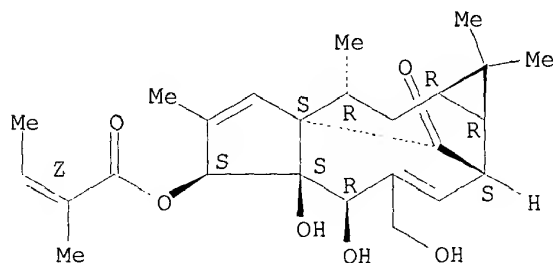
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 75567-37-2 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-
1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-4-(hydroxymethyl)-1,1,7,9-
tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-
yl ester, (2Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.

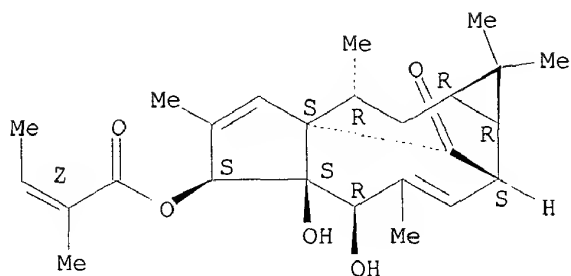


RN 75567-38-3 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-
1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-1,1,4,7,9-pentamethyl-11-oxo-
1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-yl ester, (2Z)-
(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

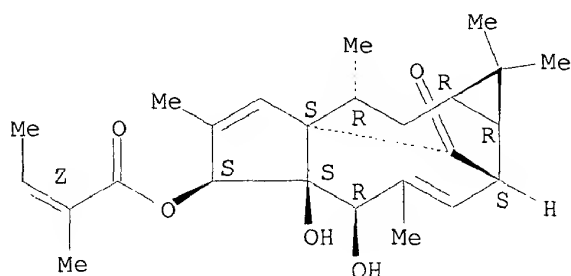
Double bond geometry as shown.



RN 75567-38-3 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-1,1,4,7,9-pentamethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-yl ester, (2Z)- (9CI) (CA INDEX NAME)

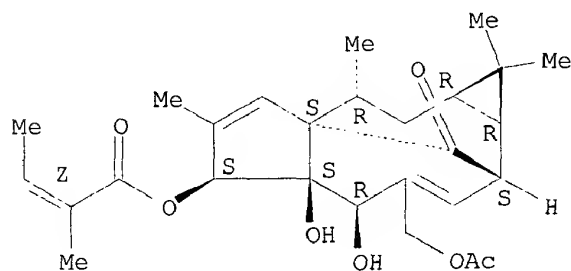
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



RN 82425-35-2 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-4-[(acetyloxy)methyl]-1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-1,1,7,9-tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-yl ester, (2Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.

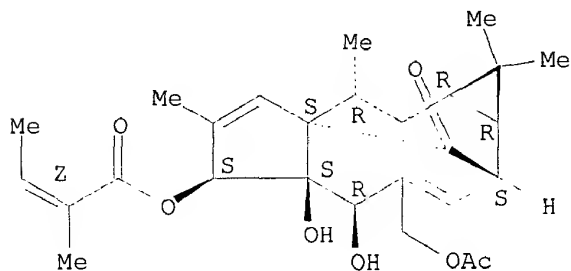


RN 82425-35-2 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-4-[(acetyloxy)methyl]-1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-1,1,7,9-tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-

yl ester, (2Z)- (9CI) (CA INDEX NAME)

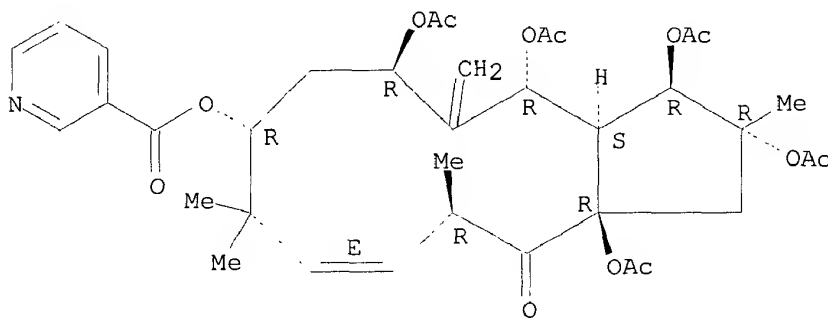
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 210108-85-3 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6R,8R,10E,12R,13aR)-2,3,4,6,13a-pentakis(acetyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-2,9,9,12-tetramethyl-5-methylene-13-oxo-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

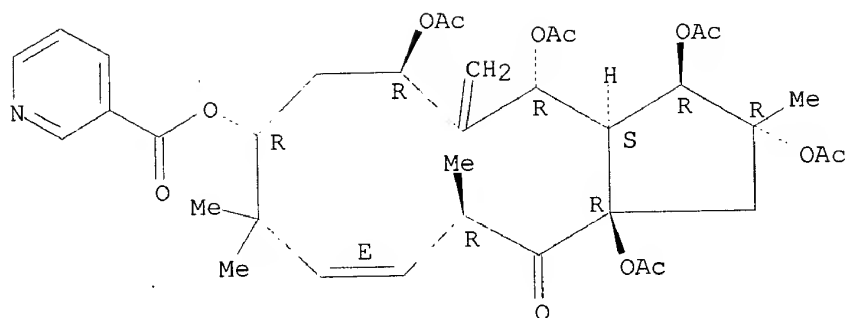
Absolute stereochemistry. Rotation (-).
Double bond geometry as described by E or Z.



RN 210108-85-3 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6R,8R,10E,12R,13aR)-2,3,4,6,13a-pentakis(acetyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-2,9,9,12-tetramethyl-5-methylene-13-oxo-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

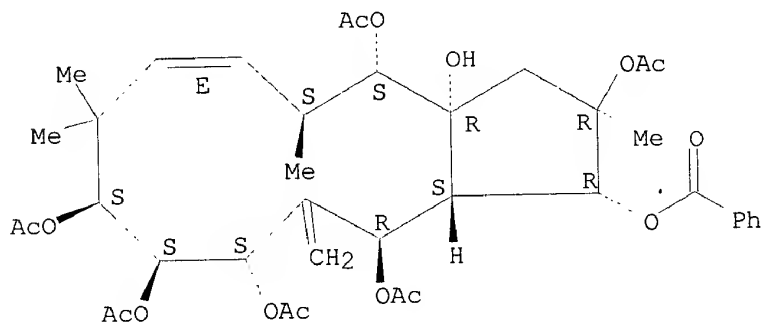
Absolute stereochemistry. Rotation (-).
Double bond geometry as described by E or Z.



RN 210108-86-4 HCAPLUS

CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,
 1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-
 , 2,4,9,10,11,13-hexaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13
 R,13aS)- (9CI) (CA INDEX NAME)

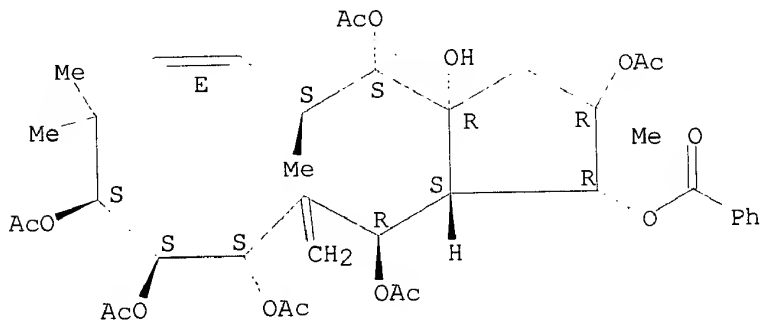
Absolute stereochemistry. Rotation (-).
 Double bond geometry as described by E or Z.



RN 210108-86-4 HCAPLUS

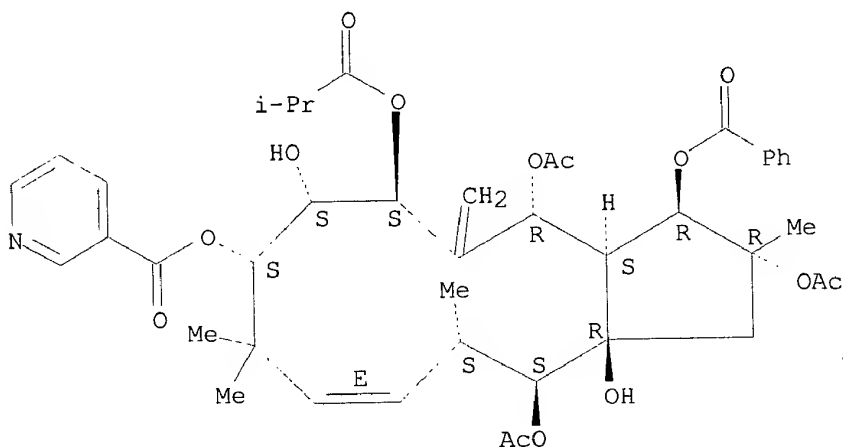
CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,
 1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-
 , 2,4,9,10,11,13-hexaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13
 R,13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
 Double bond geometry as described by E or Z.



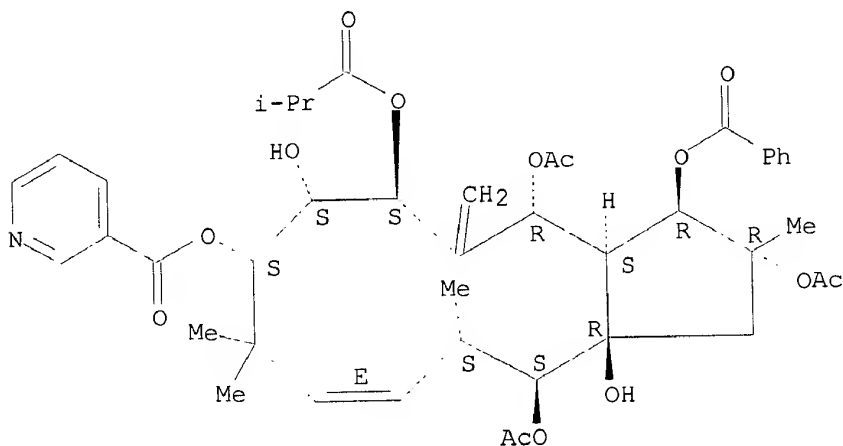
RN 210108-87-5 HCAPLUS
 CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,13-tris(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-6-(2-methyl-1-oxopropoxy)-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
 Double bond geometry as described by E or Z.



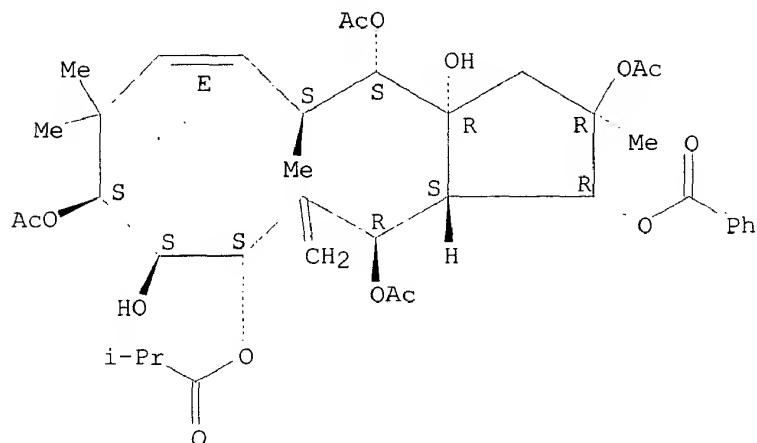
RN 210108-87-5 HCAPLUS
 CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,13-tris(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-6-(2-methyl-1-oxopropoxy)-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
 Double bond geometry as described by E or Z.



RN 210108-88-6 HCAPLUS
 CN Propanoic acid, 2-methyl-, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,8,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-cyclopentacyclododecen-6-yl ester (9CI) (CA INDEX NAME)

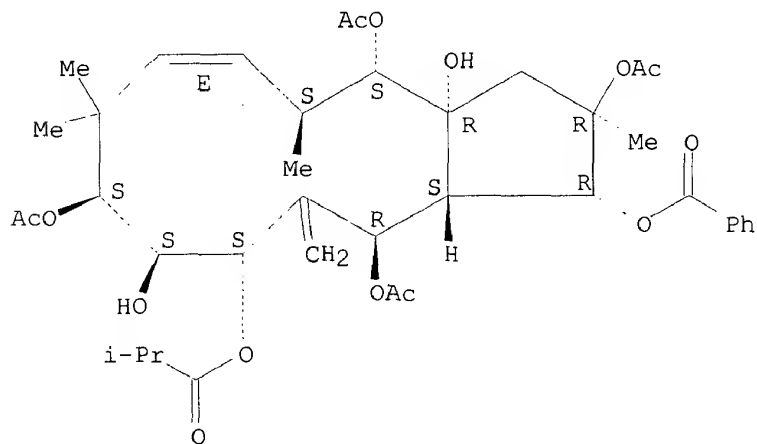
Absolute stereochemistry. Rotation (+).
Double bond geometry as described by E or Z.



RN 210108-88-6 HCAPLUS

CN Propanoic acid, 2-methyl-, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,8,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-cyclopentacyclododecen-6-yl ester (9CI) (CA INDEX NAME)

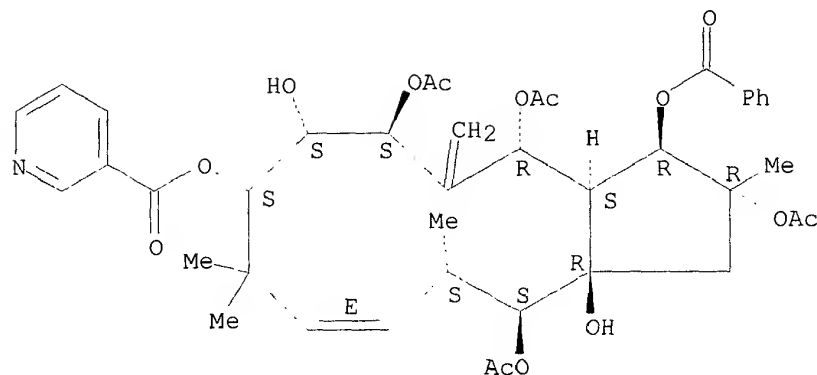
Absolute stereochemistry. Rotation (+).
Double bond geometry as described by E or Z.



RN 210108-89-7 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,6,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

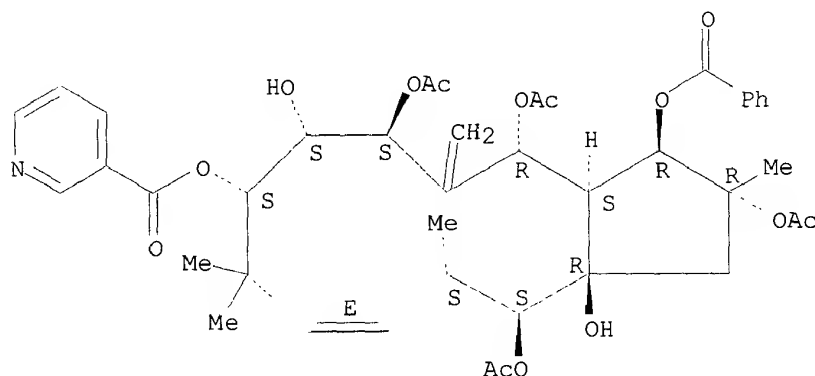
Absolute stereochemistry. Rotation (+).
Double bond geometry as described by E or Z.



RN 210108-89-7 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-
2,4,6,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-
dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-
cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

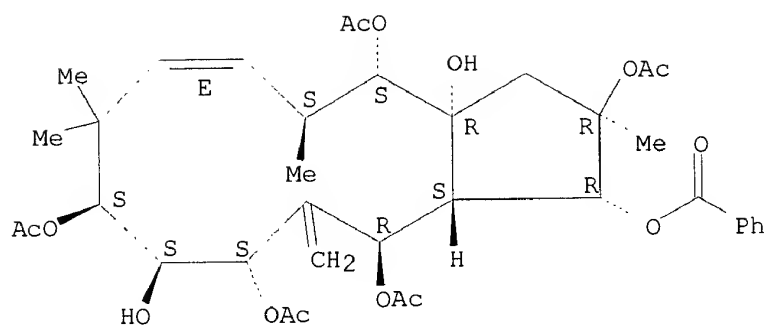
Absolute stereochemistry. Rotation (+).
Double bond geometry as described by E or Z.



RN 210108-90-0 HCAPLUS

CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,
1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-
, 2,4,9,11,13-pentaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13R,
13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as described by E or Z.

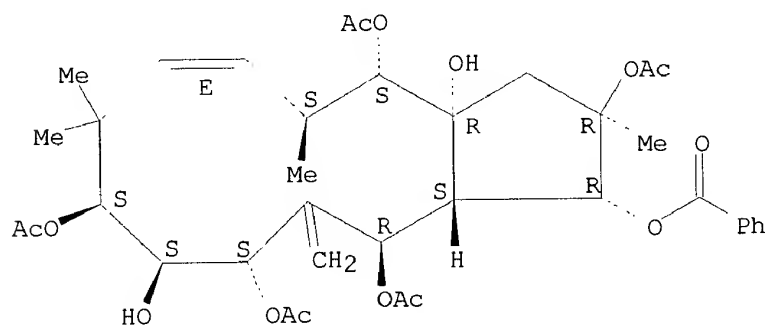


RN 210108-90-0 HCAPLUS

CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,
1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-
, 2,4,9,11,13-pentaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13R,
13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

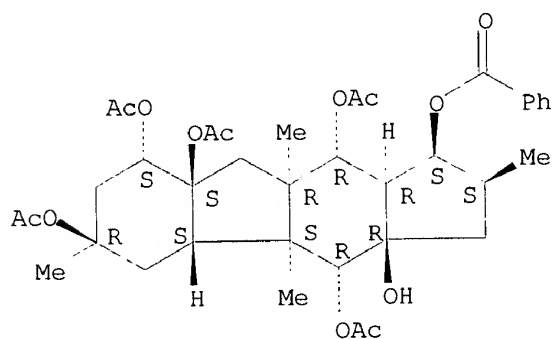
Double bond geometry as described by E or Z.



RN 210108-91-1 HCAPLUS

CN Cyclopenta[b]fluorene-1,3a,4,6,8,8a,10(1H,4H)-heptol, dodecahydro-
2,4a,6,9a-tetramethyl-, 4,6,8,8a,10-pentaacetate 1-benzoate,
(1S,2S,3aR,4R,4aS,4bS,6R,8R,8aR,9aR,10R,10aR)- (9CI) (CA INDEX NAME)

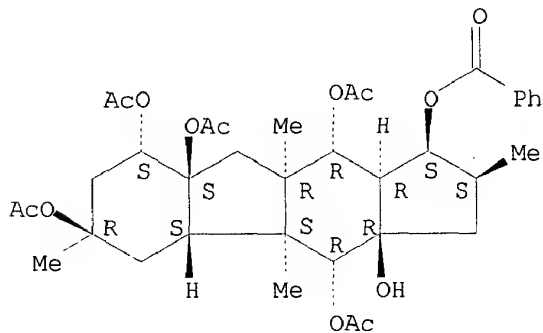
Absolute stereochemistry.



RN 210108-91-1 HCAPLUS

CN Cyclopenta[b]fluorene-1,3a,4,6,8,8a,10(1H,4H)-heptol, dodecahydro-
2,4a,6,9a-tetramethyl-, 4,6,8,8a,10-pentaacetate 1-benzoate,
(1S,2S,3aR,4R,4aS,4bS,6R,8R,8aR,9aR,10R,10aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K035-78
ICS A61K031-455; A61K031-22; A61P035-00
CC 1-6 (Pharmacology)
Section cross-reference(s): 11
ST prostate cancer treatment diterpene Euphorbiaceae
IT Receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(PSA; diterpenes from Euphorbiaceae for treatment of prostate cancer)
IT Bone
(bone-seeking agent; diterpenes from Euphorbiaceae for treatment of
prostate cancer)
IT Antibodies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(conjugates; diterpenes from Euphorbiaceae for treatment of prostate
cancer)
IT Acalypha
Acidoton
Actinostemon
Adelia
Adenocline
Adenocrepis
Adenophaedra
Adisca
Agrostistachys
Alchornea
Alchorneopsis
Alcinaeanthus
Alcoceria
Aleurites
Amanoa
Andrachne
Angostyles
Anisophyllum
Antidesma
Antitumor agents
Aphora
Aporosa
Aporosella
Argythamnia

Astrococcus
Astrogyne
B cell (lymphocyte)
Baccaurea
Baliospermum
Bernardia
Beyeriopsis
Bischofia
Blachia
Blumeodondron
Bonania
Bradleia
Breynia
Breyniopsis
Briedelia
Buraeavia
Caperonia
Caryodendron
Celianella
Cephalocroton
Chaenotheca
Chaetocarpus
Cheillosa
Chiropetalum
Choriophyllum
Cicca
Claoxylon
Cleidion
Cleistanthus
Clutia
Cnesmone
Cnidoscolus
Coccoceras
Codiaeum
Coelodiscus
Conami
Conceveiba
Conceveibastrum
Conceveibum
Corythea
Croizatia
Croton
Crotonopsis
Crozophora
Cubanthus
Cunuria
Dactylostemon
Dalechampia
Dendritic cell
Dendrocousinsia
Diasperus
Didymocistus
Dimorphocalyx
Discocarpus
Ditaxis
Dodecastigma
Drug delivery systems
Drug targeting
Drypetes
Dysopsis

Elateriospermum
Endadenium
Endospermum
Erismanthus
Erythrocarpus
Erythrochilus
Eumecanthus
Euphorbia
Euphorbia aaron-rossii
Euphorbia abbreviata
Euphorbia acuta
Euphorbia alatocaulis
Euphorbia albicaulis
Euphorbia albomarginata
Euphorbia alicae
Euphorbia alta
Euphorbia anacampseros
Euphorbia andromedae
Euphorbia angusta
Euphorbia anthonyi
Euphorbia antiguensis
Euphorbia apocynifolia
Euphorbia arabica
Euphorbia ariensis
Euphorbia arizonica
Euphorbia arkansana
Euphorbia arteagae
Euphorbia arundelana
Euphorbia astroites
Euphorbia atrococca
Euphorbia baselices
Euphorbia batabanensis
Euphorbia bergeri
Euphorbia bermudiana
Euphorbia bicolor
Euphorbia biformis
Euphorbia bifurcata
Euphorbia bilobata
Euphorbia biramensis
Euphorbia biuncialis
Euphorbia blepharostipula
Euphorbia blodgetti
Euphorbia boerhaavioides
Euphorbia boliviana
Euphorbia bracei
Euphorbia brachiata
Euphorbia brachycera
Euphorbia brandegeei
Euphorbia brittonii
Euphorbia caesia
Euphorbia calcicola
Euphorbia campestris
Euphorbia candelabrum
Euphorbia capitellata
Euphorbia carmenensis
Euphorbia carunculata
Euphorbia cayensis
Euphorbia celastroides
Euphorbia chalicophila
Euphorbia chamaerrhodos

Euphorbia chamaesula
Euphorbia chiapensis
Euphorbia chiogenoides
Euphorbia cinerascens
Euphorbia clarionensis
Euphorbia colimae
Euphorbia colorata
Euphorbia commutata
Euphorbia consoquitlae
Euphorbia convolvuloides
Euphorbia corallifera
Euphorbia creberrima
Euphorbia crenulata
Euphorbia cubensis
Euphorbia cuspidata
Euphorbia cymbiformis
Euphorbia darlingtonii
Euphorbia defoliata
Euphorbia degeneri
Euphorbia deltoidea
Euphorbia dentata
Euphorbia depressa
Euphorbia dictyosperma
Euphorbia dioeca
Euphorbia discoidalis
Euphorbia dorsiventralis
Euphorbia drummondii
Euphorbia duclouxii
Euphorbia dussii
Euphorbia eanophylla
Euphorbia eggersii
Euphorbia eglandulosa
Euphorbia elata
Euphorbia enalla
Euphorbia eriogonoides
Euphorbia eriophylla
Euphorbia esculaeformis
Euphorbia espirituensis
Euphorbia esula
Euphorbia excisa
Euphorbia exclusiva
Euphorbia exstipitata
Euphorbia exstipulata
Euphorbia fendleri
Euphorbia filicaulis
Euphorbia filiformis
Euphorbia florida
Euphorbia fruticulosa
Euphorbia garberi
Euphorbia gaumerii
Euphorbia gerardiana
Euphorbia geyeri
Euphorbia glyptosperma
Euphorbia gorgonis
Euphorbia gracilior
Euphorbia gracillima
Euphorbia gradyi
Euphorbia graminea
Euphorbia grisea
Euphorbia guadalajarana

Euphorbia guanarensis
 Euphorbia gymnadenia
 Euphorbia haematantha
 Euphorbia hedyotoides
 Euphorbia heldrichii
 Euphorbia helenae
 Euphorbia helleri
 Euphorbia helwigii
 Euphorbia henricksonii
 Euphorbia heterophylla
 Euphorbia hexagona
 Euphorbia hexagonoides
 Euphorbia hinkleyorum
 Euphorbia hintonii
 Euphorbia hirta
 Euphorbia hirtula
 Euphorbia hooveri
 Euphorbia humistrata
 Euphorbia hypericifolia
 Euphorbia inundata
 Euphorbia involuta
 Euphorbia jaliscensis
 Euphorbia jejuna
 Euphorbia johnstonii
 Euphorbia juttae
 Euphorbia knuthii
 Euphorbia lasiocarpa
 Euphorbia lata
 Euphorbia latazi
 Euphorbia latericolor
 Euphorbia laxiflora
 Euphorbia lecheoides
 Euphorbia ledienii
 Euphorbia leucophylla
 Euphorbia lineata
 Euphorbia linguiformis
 Euphorbia longecornuta
 Euphorbia longepetiolata
 Euphorbia longeramosa
 Euphorbia longinsulicola

(diterpenes from Euphorbiaceae for treatment of prostate cancer)

IT Euphorbia longipila
 Euphorbia lupulina
 Euphorbia lurida
 Euphorbia lycioides
 Euphorbia macropodoides
 Euphorbia macvaughiana
 Euphorbia manca
 Euphorbia mandoniana
 Euphorbia mangleti
 Euphorbia mango
 Euphorbia marylandica
 Euphorbia mayana
 Euphorbia melanadenia
 Euphorbia melanocarpa
 Euphorbia meridensis
 Euphorbia mertonii
 Euphorbia mexiae
 Euphorbia microcephala
 Euphorbia microclada

Euphorbia micromera
Euphorbia misella
Euphorbia missurica
Euphorbia montana
Euphorbia montereyana
Euphorbia multicaulis
Euphorbia multiformis
Euphorbia multinodis
Euphorbia multiseta
Euphorbia muscicola
Euphorbia neomexicana
Euphorbia nephradenia
Euphorbia niqueroana
Euphorbia oaxacana
Euphorbia occidentalis
Euphorbia odontodenia
Euphorbia olivacea
Euphorbia olowaluana
Euphorbia ophthalmica
Euphorbia ovata
Euphorbia pachypoda
Euphorbia pachyrhiza
Euphorbia padifolia
Euphorbia palmeri
Euphorbia paludicola
Euphorbia paralias
Euphorbia parishii
Euphorbia parryi
Euphorbia parviflora
Euphorbia paxiana
Euphorbia pediculifera
Euphorbia peplidion
Euphorbia peploides
Euphorbia peplus
Euphorbia pergamena
Euphorbia perlignea
Euphorbia petaloidea
Euphorbia petrina
Euphorbia picachensis
Euphorbia pilosula
Euphorbia pinariona
Euphorbia pinctorum
Euphorbia pionsperma
Euphorbia platysperma
Euphorbia plicata
Euphorbia poeppigii
Euphorbia poliosperma
Euphorbia polycarpa
Euphorbia polycnemoides
Euphorbia polyphylla
Euphorbia portoricensis
Euphorbia portulacoides
Euphorbia portulana
Euphorbia preslii
Euphorbia prostrata
Euphorbia pteroneura
Euphorbia pycnanthema
Euphorbia ramosa
Euphorbia rapulum
Euphorbia remyi

Euphorbia retroscabra
Euphorbia revoluta
Euphorbia rivularis
Euphorbia robusta
Euphorbia rubida
Euphorbia rubrosperma
Euphorbia rupicola
Euphorbia sanmartensis
Euphorbia saxatilis
Euphorbia schizoloba
Euphorbia sclerocyathium
Euphorbia scopulorum
Euphorbia senilis
Euphorbia serpyllifolia
Euphorbia serrula
Euphorbia setiloba
Euphorbia sonorae
Euphorbia soobyi
Euphorbia sparsiflora
Euphorbia sphaerosperma
Euphorbia spruceana
Euphorbia stellata
Euphorbia subcoerulea
Euphorbia submamillaris
Euphorbia subpeltata
Euphorbia subpubens
Euphorbia subreniforme
Euphorbia subtrifoliata
Euphorbia succedanea
Euphorbia syphilitica
Euphorbia tamaulipasana
Euphorbia telephioides
Euphorbia tenuissima
Euphorbia tetrapora
Euphorbia tirucalli
Euphorbia tomentella
Euphorbia tomentosa
Euphorbia torralbasii
Euphorbia towarensis
Euphorbia trachysperma
Euphorbia tricolor
Euphorbia troyana
Euphorbia tuerckheimii
Euphorbia turczaninowii
Euphorbia umbellulata
Euphorbia undulata
Euphorbia vermiformis
Euphorbia versicolor
Euphorbia villifera
Euphorbia violacea
Euphorbia whitei
Euphorbia xanti
Euphorbia xylopoda
Euphorbia yayalesia
Euphorbia yungasensis
Euphorbia zeravschanica
Euphorbia zinniiflora
Euphorbiaceae
Euphorbiodendron
Excoecaria

Fluggea
Garcia
Gavarretia
Gelonium
Gitara
Givotia
Glochidion
Glochidionopsis
Glycydendron
Gymnanthes
Gymnosporia
Haematospermum
Hendecandras
Hevea
Hieronima
Hippocrepantha
Homalanthus
Hymenocardia
Immunostimulants
Janipha
Jatropha
Julocroton
Lasiocroton
Leiocarpus
Leonardia
Lepidanthus
Leucocroton
Mabea
Macaranga
Macrocroton
Mallotus (plant)
Manihot
Mappa
Maprounea
Melanthesa
Mercurialis
Mettenia
Micrandra
Microdesmis
Microelus
Microstachys
Monadenium
Mozinna
Neoscortechinia
Omalthus
Omphalea
Ophellantha
Orbicularia
Ostodes
Oxydectes
Palenga
Pantadenia
Paradrypetes
Pausandra
Pedilanthus
Pera
Peridium
Petalostigma
Phyllanthus
Picrodendron

Pierardia
 Pilinophytum
 Pimeleodendron
 Piranhea
 Platygyyna
 Plukenetia
 Podocalyx
 Poinsettia
 Poraresia
 Prosartema
 Pseudanthus
 Pycnocomma
 Quadrasia
 Reverchonia
 Richeria
 Richeriella
 Ricinella
 Ricinocarpos
 Rottlera
 Sagotia
 Sandwithia
 Sapium
 Savia
 Sclerocroton
 Sebastiania
 Securinega
 Senefeldera
 Serophyton
 Siphonia
 Spathiostemon
 Spixia
 Stillingia
 Strophoblachia
 Synadenium
 T cell (lymphocyte)
 Tetracoccus
 Tetraplandra
 Tetrorchidium
 Thyrsanthera
 Tithymalus
 Tragia
 Trewia
 Trigonostemon
 Tyria
 Xylophylla
 (diterpenes from Euphorbiaceae for treatment of prostate cancer)
 IT Immunoglobulins
 Prostate-specific antigen
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (diterpenes from Euphorbiaceae for treatment of prostate cancer)
 IT Diterpenes
 RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU
 (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
 (diterpenes from Euphorbiaceae for treatment of prostate cancer)
 IT Prostate gland
 (neoplasm, inhibitors; diterpenes from Euphorbiaceae for treatment of
 prostate cancer)
 IT Prostate gland
 (neoplasm, prostate-specific tumor marker; diterpenes from
 Euphorbiaceae for treatment of prostate cancer)

IT Antitumor agents
 (prostate gland; diterpenes from Euphorbiaceae for treatment of prostate cancer)

IT Antigens
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (prostate-specific membrane antigen (PMSA); diterpenes from Euphorbiaceae for treatment of prostate cancer)

IT Drug interactions
 (synergistic; diterpenes from Euphorbiaceae for treatment of prostate cancer)

IT 13598-36-2D, Phosphonic acid, alkylidenebis- derivs.
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (Bisphosphonate; diterpenes from Euphorbiaceae for treatment of prostate cancer)

IT 1984-15-2 15663-27-1, Cisplatin 38937-66-5
 67707-88-4, Ingenane 67707-88-4D,
 Ingenane, derivs. 75567-37-2 75567-37-2D,
 derivs. 75567-38-3 75567-38-3D, derivs.
 82425-35-2 82425-35-2D, derivs. 210108-85-3,
 Jatrophane 1 210108-85-3D, Jatrophane 1, derivs.
 210108-86-4, Jatrophane 2 210108-86-4D, Jatrophane 2,
 derivs. 210108-87-5, Jatrophane 3 210108-87-5D,
 Jatrophane 3, derivs. 210108-88-6, Jatrophane 4
 210108-88-6D, Jatrophane 4, derivs. 210108-89-7,
 Jatrophane 5 210108-89-7D, Jatrophane 5, derivs.
 210108-90-0, Jatrophane 6 210108-90-0D, Jatrophane 6,
 derivs. 210108-91-1, Pepluane 210108-91-1D, Pepluane,
 derivs.
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (diterpenes from Euphorbiaceae for treatment of prostate cancer)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L4 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 2001:903883 HCAPLUS
 DOCUMENT NUMBER: 136:31680
 TITLE: Euphorbiaceae macrocyclic diterpenes for the treatment of inflammation
 INVENTOR(S): Aylward, James Harrison; Parsons, Peter Gordon; Suhrbier, Andreas; Turner, Kathleen Anne
 PATENT ASSIGNEE(S): Peplin Research Pty. Ltd., Australia
 SOURCE: PCT Int. Appl., 172 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001093885	A1	20011213	WO 2001-AU680	20010607
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 752435	B2	20020919	AU 2001-63662	20010607
PRIORITY APPLN. INFO.:			AU 2000-8017	A 20000607
			WO 2001-AU680	W 20010607

OTHER SOURCE(S): MARPAT 136:31680

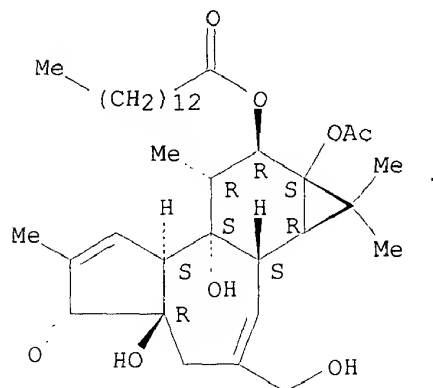
AB The invention relates generally to chem. agents useful in the treatment and prophylaxis of inflammatory conditions or in the amelioration of symptoms resulting from or facilitated by an inflammatory condition in a mammalian animal, including humans and primates, non-mammalian animal, and avian species. More particularly, the invention provides a chem. agent of the macrocyclic diterpene family obtaining from a member of the Euphorbiaceae family of plants or botanical or horticultural relatives thereof or derivs. or chem. analogs or chem. synthetic forms of the agents for use in the treatment or prophylaxis of an inflammatory condition or in the amelioration of symptoms resulting from or facilitated by an inflammatory condition in a mammal, animal or avian species. The invention further provides a method for the prophylaxis or treatment of mammalian, animal or avian subjects for inflammatory conditions including chronic or transitory inflammatory conditions or for ameliorating the symptoms of an inflammatory condition by the topical or systemic administration of a macrocyclic diterpene obtainable from a member of the Euphorbiaceae family or botanical or horticultural relatives thereof or a deriv., chem. analog or chem. synthetic form of the agent. The chem. agent of the invention may be in the form of a purified compd., mixt. of compds., a precursor form of one or more of the compds. capable of chem. transformation into a therapeutically active agent, or be in the form of a chem. fraction, sub-fraction, or prepn. or ext. of the plant.

IT 16561-29-8, Pma 37558-16-0, Phorbol dibutyrate
 141436-78-4, Protein kinase C

RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (Euphorbiaceae macrocyclic diterpene for inflammation treatment)

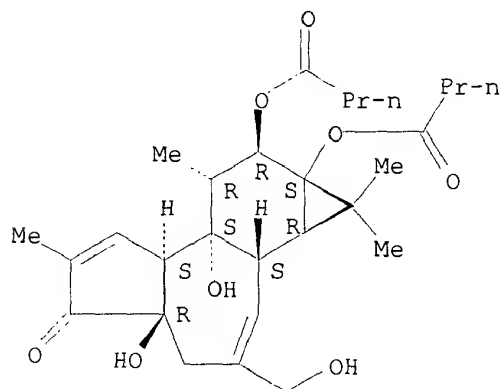
RN 16561-29-8 HCAPLUS
 CN Tetradecanoic acid, (1aR,1bS,4aR,7aS,7bS,8R,9R,9aS)-9a-(acetyloxy)-
 1a,1b,4,4a,5,7a,7b,8,9,9a-decahydro-4a,7b-dihydroxy-3-(hydroxymethyl)-
 1,1,6,8-tetramethyl-5-oxo-1H-cyclopropa[3,4]benz[1,2-e]azulen-9-yl ester
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 37558-16-0 HCAPLUS
 CN Butanoic acid, (1aR,1bS,4aR,7aS,7bS,8R,9R,9aS)-1,1a,1b,4,4a,5,7a,7b,8,9-
 decahydro-4a,7b-dihydroxy-3-(hydroxymethyl)-1,1,6,8-tetramethyl-5-oxo-9aH-
 cyclopropa[3,4]benz[1,2-e]azulene-9,9a-diyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 141436-78-4 HCAPLUS
 CN Kinase (phosphorylating), protein, C (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

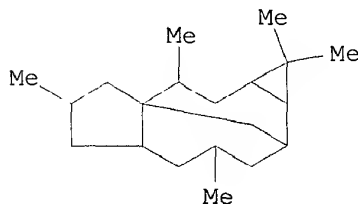
IT 67707-88-4, Ingenane 67707-88-4D,
 Ingenane, derivs. 75567-37-2 82425-35-2
 210108-85-3, Jatrophane 1 210108-85-3D, Jatrophane 1,
 derivs. 210108-86-4, Jatrophane 2 210108-86-4D,
 Jatrophane 2, derivs. 210108-87-5, Jatrophane 3
 210108-87-5D, Jatrophane 3, derivs. 210108-88-6,
 Jatrophane 4 210108-88-6D, Jatrophane 4, derivs.

210108-89-7, Jatrophane 5 210108-89-7D, Jatrophane 5,
 derivs. 210108-90-0, Jatrophane 6 210108-90-0D,
 Jatrophane 6, derivs.

RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU
 (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
 (Euphorbiaceae macrocyclic diterpene for inflammation treatment)

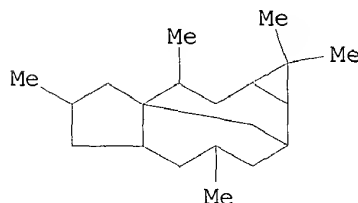
RN 67707-88-4 HCAPLUS

CN 1H-2,8a-Methanocyclopenta[a]cyclopropa[e]cyclodecene, dodecahydro-
 1,1,4,7,9-pentamethyl-, (1aS,2R,4R,5aR,7R,8aR,9R,10aR)- (9CI) (CA INDEX
 NAME)



RN 67707-88-4 HCAPLUS

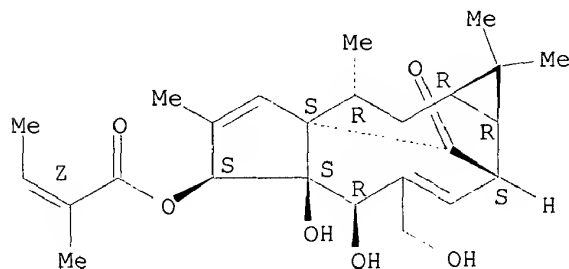
CN 1H-2,8a-Methanocyclopenta[a]cyclopropa[e]cyclodecene, dodecahydro-
 1,1,4,7,9-pentamethyl-, (1aS,2R,4R,5aR,7R,8aR,9R,10aR)- (9CI) (CA INDEX
 NAME)



RN 75567-37-2 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-
 1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-4-(hydroxymethyl)-1,1,7,9-
 tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-
 yl ester, (2Z)- (9CI) (CA INDEX NAME)

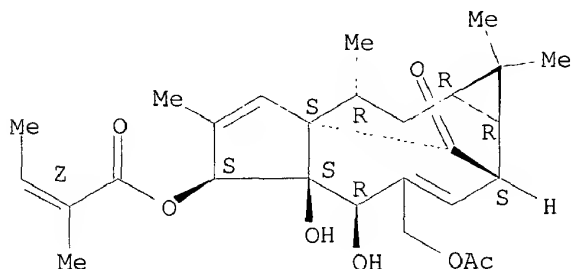
Absolute stereochemistry. Rotation (+).
 Double bond geometry as shown.



RN 82425-35-2 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-4-[(acetyloxy)methyl]-1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-1,1,7,9-tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-yl ester, (2Z)- (9CI) (CA INDEX NAME)

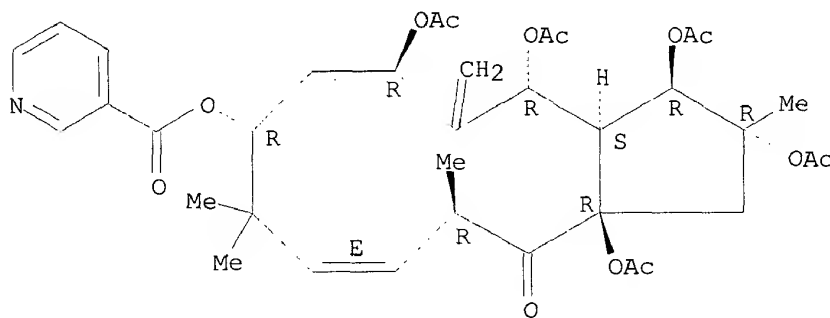
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 210108-85-3 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6R,8R,10E,12R,13aR)-2,3,4,6,13a-pentakis(acetyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-2,9,9,12-tetramethyl-5-methylene-13-oxo-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

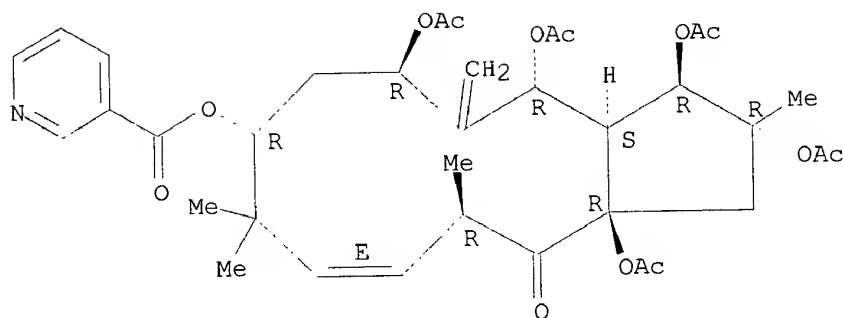
Absolute stereochemistry. Rotation (-).
Double bond geometry as described by E or Z.



RN 210108-85-3 HCAPLUS

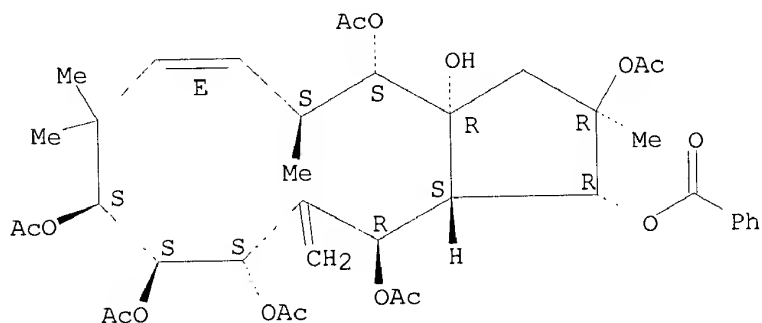
CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6R,8R,10E,12R,13aR)-2,3,4,6,13a-pentakis(acetyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-2,9,9,12-tetramethyl-5-methylene-13-oxo-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as described by E or Z.



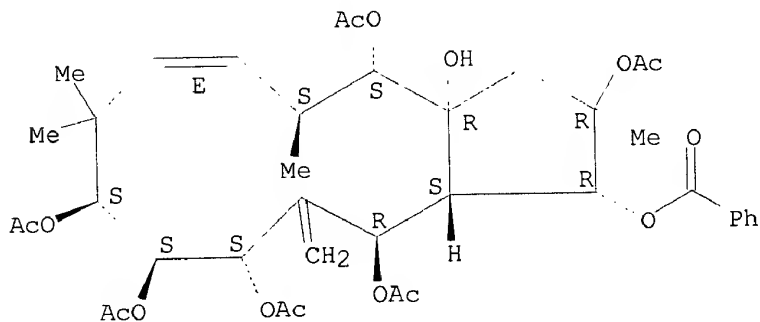
RN 210108-86-4 HCAPLUS
 CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,
 1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-
 , 2,4,9,10,11,13-hexaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13
 R,13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
 Double bond geometry as described by E or Z.



RN 210108-86-4 HCAPLUS
 CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,
 1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-
 , 2,4,9,10,11,13-hexaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13
 R,13aS)- (9CI) (CA INDEX NAME)

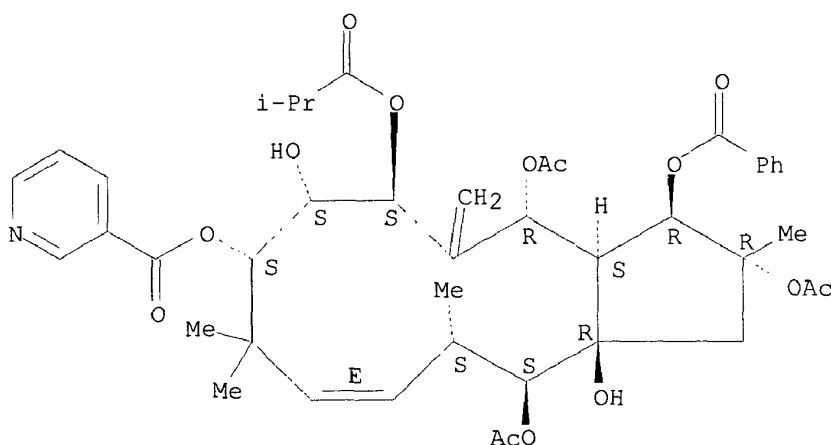
Absolute stereochemistry. Rotation (-).
 Double bond geometry as described by E or Z.



RN 210108-87-5 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,13-tris(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-6-(2-methyl-1-oxopropoxy)-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

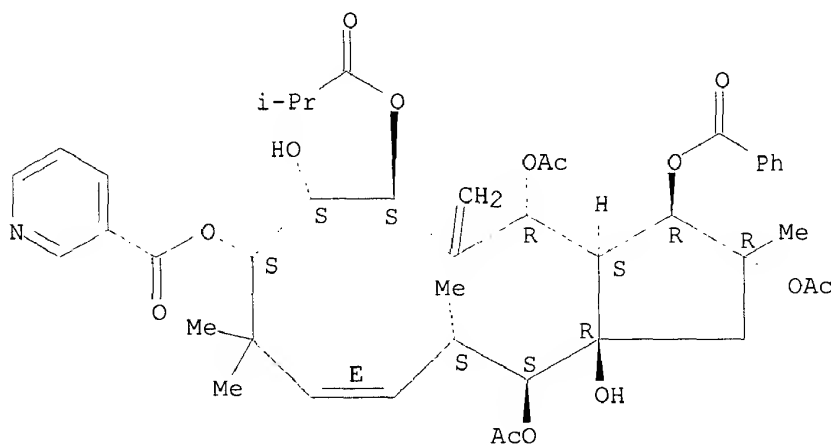
Absolute stereochemistry. Rotation (+).
Double bond geometry as described by E or Z.



RN 210108-87-5 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,13-tris(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-6-(2-methyl-1-oxopropoxy)-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

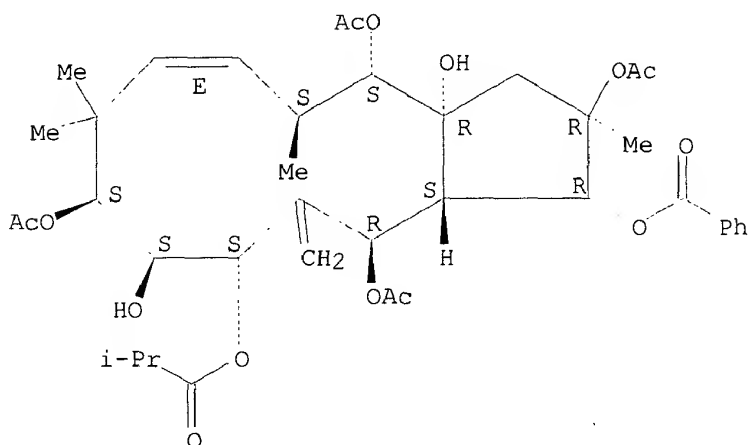
Absolute stereochemistry. Rotation (+).
Double bond geometry as described by E or Z.



RN 210108-88-6 HCAPLUS

CN Propanoic acid, 2-methyl-, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,8,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-cyclopentacyclododecen-6-yl ester (9CI) (CA INDEX NAME)

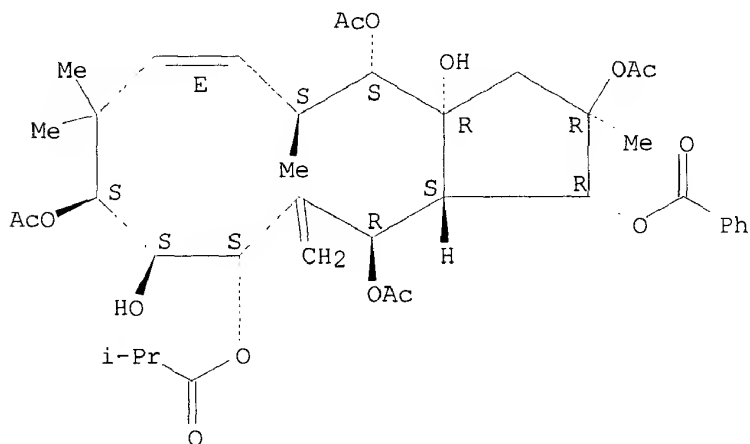
Absolute stereochemistry. Rotation (+).
Double bond geometry as described by E or Z.



RN 210108-88-6 HCAPLUS

CN Propanoic acid, 2-methyl-, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,8,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-cyclopentacyclododecen-6-yl ester (9CI) (CA INDEX NAME)

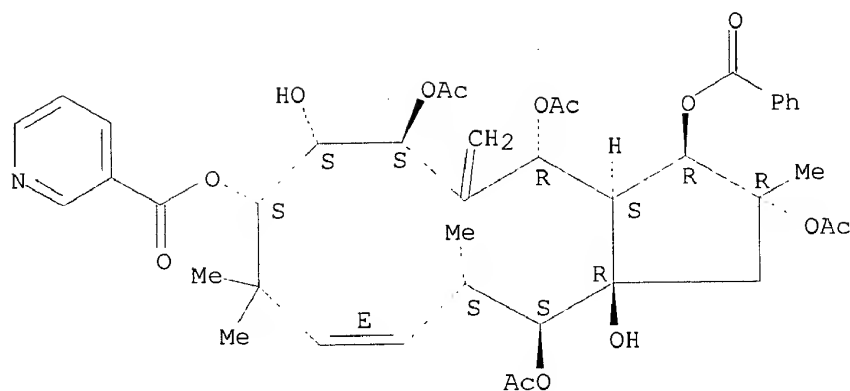
Absolute stereochemistry. Rotation (+).
Double bond geometry as described by E or Z.



RN 210108-89-7 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,6,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

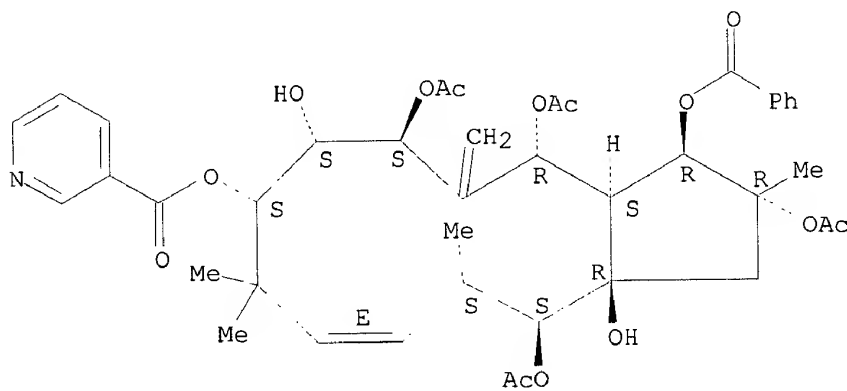
Absolute stereochemistry. Rotation (+).
Double bond geometry as described by E or Z.



RN 210108-89-7 HCAPLUS

3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-
2,4,6,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-
dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-
cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

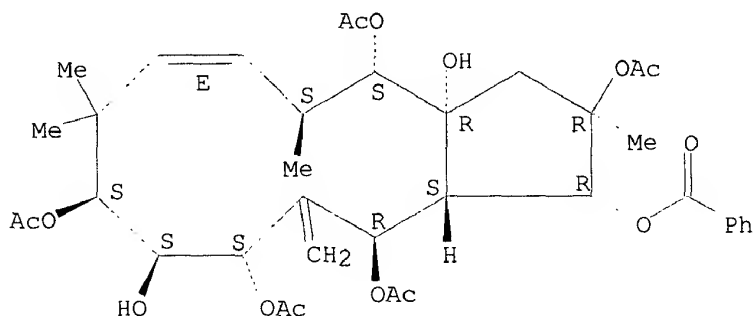
Absolute stereochemistry. Rotation (+).
Double bond geometry as described by E or Z.



RN 210108-90-0 HCAPLUS

3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,
CN 2,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-
1,2,4,9,11,13-pentaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13R,
13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as described by E or Z.

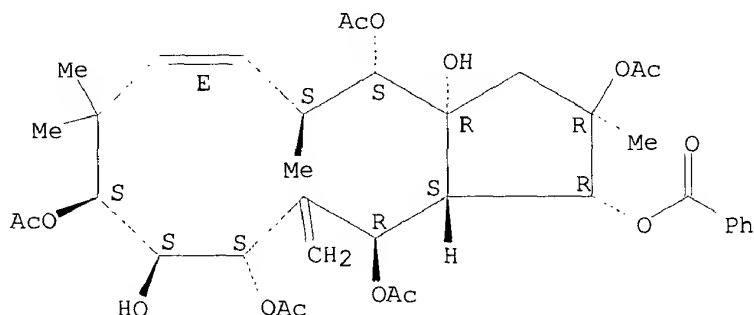


RN 210108-90-0 HCAPLUS

CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,
1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-
, 2,4,9,11,13-pentaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13R,
13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as described by E or Z.

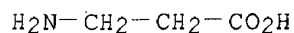


IT 107-95-9, .beta.-Alanine 515-25-3 590-46-5,
Betaine hydrochloride

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(carrier; Euphorbiaceae macrocyclic diterpene for inflammation
treatment)

RN 107-95-9 HCAPLUS

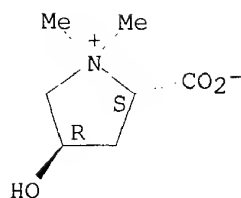
CN .beta.-Alanine (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 515-25-3 HCAPLUS

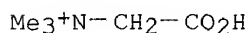
CN Pyrrolidinium, 2-carboxy-4-hydroxy-1,1-dimethyl-, inner salt, (2S,4R)-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 590-46-5 HCAPLUS

CN Methanaminium, 1-carboxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

IC ICM A61K035-78
ICS A61K031-455; A61K031-22; A61P031-02; G06F019-00
CC 1-7 (Pharmacology)
Section cross-reference(s): 11
ST Euphorbiaceae macrocyclic diterpene antiinflammatory
IT Promoter (genetic element)
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(CMV; Euphorbiaceae macrocyclic diterpene for inflammation treatment)

IT Acalypha
Acidoton
Actinostemon
Adelia
Adenocline
Adenocrepis
Adenophaedra
Adenoviridae
Adisca
Agrostistachys
Alchornea
Alchorneopsis
Alcinaeanthus
Alcoceria
Aleurites
Amanoa
Amoeba
Andrachne
Angostyles
Anisophyllum
Anti-infective agents
Anti-inflammatory agents
Antibacterial agents
Antidesma
Antiviral agents
Aphora
Aporosa
Aporosella
Arachnida
Arbovirus

Argythamnia
Aspergillus
Astrococcus
Astrogyne
Baccaurea
Bacillus anthracis
Balantidium coli
Baliospermum
Bernardia
Beyeriopsis
Bischofia
Blachia
Blastomyces dermatitidis
Blumeodondron
Bonania
Bordetella
Bordetella pertussis
Borrelia
Borrelia burgdorferi
Bradleia
Breynia
Breyniopsis
Briedelia
Buraeavia
Caletia
Candida albicans
Caperonia
Caryodendron
Celianella
Cephalocroton
Chaenotheca
Chaetocarpus
Cheilosa
Chiropetalum
Chlamydia
Chlamydia trachomatis
Choriophyllum
Cicca
Cleidion
Cleistanthus
Clostridium
Clostridium botulinum
Clostridium perfringens
Clostridium tetani
Clutia
Cnesmone
Cnidoscolus
Coccoceras
Codiaeum
Coelodiscus
Computer application
Computer program
Conami
Conceveiba
Conceveibastrum
Conceveibum
Corynebacterium
Corynebacterium diphtheriae
Corythea
Croizatia

Croton
Crotonopsis
Crozophora
Cryptococcus neoformans
Cryptosporidium
Cubanthus
Cunuria
Cytomegalovirus
Dactylostemon
Dalechampia
Dendrocousinsia
Diasperus
Didymocistus
Dimorphocalyx
Discocarpus
Ditaxis
Dodecastigma
Drug delivery systems
Drug screening
Drypetes
Dysopsis
Elateriospermum
Endadenium
Endadenium gossweileri
Endospermum
Entamoeba histolytica
Erismanthus
Erythrocarpus
Erythrochilus
Escherichia
Escherichia coli
Eumecanthus
Euphorbia
Euphorbia aaron-rossii
Euphorbia abbreviata
Euphorbia acuta
Euphorbia alatocaulis
Euphorbia albicaulis
Euphorbia albomarginata
Euphorbia aliceae
Euphorbia alta
Euphorbia anacampseros
Euphorbia andromedae
Euphorbia angusta
Euphorbia antiquensis
Euphorbia apocynifolia
Euphorbia arabica
Euphorbia ariensis
Euphorbia arizonica
Euphorbia arkansana
Euphorbia arteagae
Euphorbia arundelana
Euphorbia astroites
Euphorbia atrococca
Euphorbia baselices
Euphorbia batabanensis
Euphorbia bergeri
Euphorbia bermudiana
Euphorbia bicolor
Euphorbia biformis

Euphorbia bifurcata
Euphorbia bilobata
Euphorbia biramensis
Euphorbia biuncialis
Euphorbia blepharostipula
Euphorbia blodgetti
Euphorbia boerhaavioides
Euphorbia boliviana
Euphorbia bracei
Euphorbia brachiata
Euphorbia brachycera
Euphorbia brandegeei
Euphorbia brittonii
Euphorbia caesia
Euphorbia calcicola
Euphorbia campestris
Euphorbia candelabrum
Euphorbia capitellata
Euphorbia carmenensis
Euphorbia carunculata
Euphorbia cayensis
Euphorbia celastroides
Euphorbia chalicophila
Euphorbia chamaerrhodos
Euphorbia chamaesula
Euphorbia chiapensis
Euphorbia chiogenoides
Euphorbia cinerascens
Euphorbia clarionensis
Euphorbia colimae
Euphorbia colorata
Euphorbia commutata
Euphorbia consoquitlae
Euphorbia convolvuloides
Euphorbia corallifera
Euphorbia creberrima
Euphorbia crenulata
Euphorbia cubensis
Euphorbia cuspidata
Euphorbia cymbiformis
Euphorbia darlingtonii
Euphorbia defoliata
Euphorbia degeneri
Euphorbia deltoidea
Euphorbia dentata
Euphorbia depressa
Euphorbia dictyosperma
Euphorbia dioeca
Euphorbia discoidalis
Euphorbia dorsiventralis
Euphorbia drummondii
Euphorbia duclouxii
Euphorbia dussii
Euphorbia eanophylla
Euphorbia eggertii
Euphorbia eglandulosa
Euphorbia elata
Euphorbia enalla
Euphorbia eriogonoides
Euphorbia eriophylla

Euphorbia esculaeformis
 Euphorbia espirituensis
 Euphorbia esula
 Euphorbia excisa
 Euphorbia exclusiva
 Euphorbia exstipitata
 Euphorbia exstipulata
 Euphorbia fendleri
 Euphorbia filicaulis
 Euphorbia filiformis
 Euphorbia florida
 Euphorbia fruticulosa
 Euphorbia garberi
 Euphorbia gaumerii
 Euphorbia gerardiana
 Euphorbia geyeri
 Euphorbia glyptosperma
 Euphorbia gorgonis
 Euphorbia gracilior
 Euphorbia gracillima
 Euphorbia gradyi
 Euphorbia graminea
 Euphorbia grisea
 Euphorbia guadalajarana
 Euphorbia guanarensis
 Euphorbia gymnadenia
 Euphorbia haematantha
 Euphorbia hedyotoides
 Euphorbia heldrichii
 Euphorbia helenae
 Euphorbia helleri
 Euphorbia helwigii
 Euphorbia henricksonii
 Euphorbia heterophylla

(Euphorbiaceae macrocyclic diterpene for inflammation treatment)

IT Euphorbia hexagona
 Euphorbia hexagonoides
 Euphorbia hinkleyorum
 Euphorbia hintonii
 Euphorbia hirta
 Euphorbia hirtula
 Euphorbia hooveri
 Euphorbia humistrata
 Euphorbia hypericifolia
 Euphorbia inundata
 Euphorbia involuta
 Euphorbia jaliscensis
 Euphorbia jejuna
 Euphorbia johnstonii
 Euphorbia juttae
 Euphorbia knuthii
 Euphorbia lasiocarpa
 Euphorbia lata
 Euphorbia latazi
 Euphorbia latericolor
 Euphorbia laxiflora
 Euphorbia lecheoides
 Euphorbia ledienii
 Euphorbia leucophylla
 Euphorbia lineata

Euphorbia linguiformis
Euphorbia longecornuta
Euphorbia longepetiolata
Euphorbia longeramosa
Euphorbia longinsulicola
Euphorbia longipila
Euphorbia lupulina
Euphorbia lurida
Euphorbia lycioides
Euphorbia macropodoides
Euphorbia macvaughiana
Euphorbia manca
Euphorbia mandoniana
Euphorbia mangleti
Euphorbia mango
Euphorbia marylandica
Euphorbia mayana
Euphorbia melanadenia
Euphorbia melanocarpa
Euphorbia meridensis
Euphorbia mertonii
Euphorbia mexiae
Euphorbia microcephala
Euphorbia microclada
Euphorbia micromera
Euphorbia misella
Euphorbia missurica
Euphorbia montana
Euphorbia montereyana
Euphorbia multicaulis
Euphorbia multiformis
Euphorbia multinodis
Euphorbia multiseta
Euphorbia muscicola
Euphorbia neomexicana
Euphorbia nephradenia
Euphorbia niqueroana
Euphorbia oaxacana
Euphorbia occidentalis
Euphorbia odontodenia
Euphorbia olivacea
Euphorbia olowaluana
Euphorbia ophthalmica
Euphorbia ovata
Euphorbia pachypoda
Euphorbia pachyrhiza
Euphorbia padifolia
Euphorbia palmeri
Euphorbia paludicola
Euphorbia parishii
Euphorbia parryi
Euphorbia parviflora
Euphorbia paxiana
Euphorbia pediculifera
Euphorbia peplidion
Euphorbia peploides
Euphorbia peplus
Euphorbia pergamena
Euphorbia perlignea
Euphorbia petaloidea

Euphorbia petrina
Euphorbia picachensis
Euphorbia pilosula
Euphorbia pinariona
Euphorbia pinctorum
Euphorbia pionosperma
Euphorbia platysperma
Euphorbia plicata
Euphorbia poeppigii
Euphorbia poliosperma
Euphorbia polycarpa
Euphorbia polycnemoides
Euphorbia polyphylla
Euphorbia portoricensis
Euphorbia portulacoides
Euphorbia portulana
Euphorbia preslii
Euphorbia prostrata
Euphorbia pteroneura
Euphorbia pycnanthema
Euphorbia ramosa
Euphorbia rapulum
Euphorbia remyi
Euphorbia retroscabra
Euphorbia revoluta
Euphorbia rivularis
Euphorbia robusta
Euphorbia rubida
Euphorbia rubrosperma
Euphorbia rupicola
Euphorbia sanmartensis
Euphorbia saxatilis
Euphorbia schizoloba
Euphorbia sclerocyathium
Euphorbia scopulorum
Euphorbia senilis
Euphorbia serpyllifolia
Euphorbia serrula
Euphorbia setiloba
Euphorbia sonora
Euphorbia soobyi
Euphorbia sparsiflora
Euphorbia sphaerosperma
Euphorbia spruceana
Euphorbia stellata
Euphorbia subcoerulea
Euphorbia submammularis
Euphorbia subpeltata
Euphorbia subpubens
Euphorbia subreniforme
Euphorbia subtrifoliata
Euphorbia succedanea
Euphorbia syphilitica
Euphorbia tamaulipasana
Euphorbia telephioides
Euphorbia tenuissima
Euphorbia tetrapora
Euphorbia tirucalli
Euphorbia tomentella
Euphorbia tomentosa

Euphorbia torralbasii
Euphorbia towarensis
Euphorbia trachysperma
Euphorbia tricolor
Euphorbia troyana
Euphorbia tuerckheimii
Euphorbia turczaninowii
Euphorbia umbellulata
Euphorbia undulata
Euphorbia vermiformis
Euphorbia versicolor
Euphorbia villifera
Euphorbia violacea
Euphorbia whitei
Euphorbia xanti
Euphorbia xylopoda
Euphorbia yayalesia
Euphorbia yungasensis
Euphorbia zeravschanica
Euphorbia zinniiflora
Euphorbiaceae
Euphorbiodendron
Excoecaria
Fluggea
Fungicides
Garcia
Gavarretia
Gelonium
Giardia lamblia
Givotia
Glochidion
Glochidionopsis
Glycydendron
Gymnanthes
Gymnosporia
Haematospermum
Haemophilus
Haemophilus influenzae
Hendecandras
Hepatitis A virus
Hepatitis B virus
Hepatitis C virus
Herpesviridae
Hevea
Hieronima
Hippocrepandra
Histoplasma capsulatum
Homalanthus
Human T-lymphotropic virus 1
Human T-lymphotropic virus 2
Human herpesvirus
Human herpesvirus 3
Human herpesvirus 4
Human immunodeficiency virus
Human immunodeficiency virus 1
Human poliovirus
Hymenocardia
Immunostimulants
Influenza A virus
Influenza B virus

Insecta
 Janipha
 Jatropha
 Julocroton
 Klebsiella
 Klebsiella pneumoniae
 Lasiocroton
 Legionella
 Legionella pneumophila
 Leiocarpus
 Leishmania
 Leonardia
 Lepidanthus
 Leucocroton
 Leukocyte
 Listeria
 Listeria monocytogenes
 Mabea
 Macaranga
 Macrocroton
 Mallotus (plant)
 Manihot
 Mappa
 Maprounea
 Measles virus
 Melanthesa
 Mercurialis
 Mettenia
 Micrandra
 Microdesmis
 Microelus
 Microsporum
 Microstachys
 Monadenium
 Monadenium guentheri
 Monadenium lugardae
 Mononuclear cell (leukocyte)
 Mozinna
 Mumps virus
 (Euphorbiaceae macrocyclic diterpene for inflammation treatment)
 IT Mycobacterium
 Mycobacterium leprae
 Mycobacterium tuberculosis
 Mycoplasma
 Mycoplasma pneumoniae
 Neisseria
 Neisseria gonorrhoeae
 Neisseria meningitidis
 Nematoda
 Neoscortechinia
 Neutrophil
 Omalanthus
 Omphalea
 Ophellantha
 Orbicularia
 Ostodes
 Oxydectes
 Palenga
 Pantadenia
 Papovaviridae

Paradrypetes
Pathogen
Pausandra
Pedilanthus
Pera
Peridium
Petalostigma
Phagocytosis
Phyllanthus
Picrodendron
Pierardia
Pilinophytum
Pimeleodendron
Piranhea
Platygyne
Plukenetia
Pneumocystis carinii
Podocalyx
Poinsettia
Poraresia
Prokaryote
Propionibacterium
Propionibacterium acnes
Prosartema
Pseudanthus
Pycnocomma
Quadrasia
Rabies virus
Reverchonia
Rhinovirus
Richeria
Richeriella
Ricinella
Ricinocarpos
Rickettsia
Rickettsia rickettsi
Rottlera
Rubella virus
Sagotia
Salmonella
Salmonella typhi
Salmonella typhimurium
Sandwithia
Sapium
Savia
Sclerocroton
Sebastiania
Securinega
Senefeldera
Serophyton
Shigella
Shigella dysenteriae
Siphonia
Spathiostemon
Spixia
Staphylococcus
Staphylococcus aureus
Stillingia
Streptococcus
Streptococcus pneumoniae

Streptococcus pyogenes
 Strophoblachia
 Synadenium
 Synadenium compactum
 Synadenium grantii
 Tetracoccus
 Tetraplandra
 Tetrorchidium
 Thyrsanthera
 Tithymalus
 Toxoplasma gondii
 Tragia
 Treponema
 Treponema pallidum
 Trewia
 Trichomonas vaginalis
 Trichophyton
 Trigonostemon
 Trypanosoma cruzi
 Trypanosoma gambiense
 Tyria
 Ureaplasma
 Ureaplasma parvum
 Vaccinia virus
 Variola virus
 Vibrio
 Vibrio cholerae
 Virus
 Xylophylla
 Yersinia
 Yersinia pestis
 (Euphorbiaceae macrocyclic diterpene for inflammation treatment)
 IT Diterpenes
 Macrocyclic compounds
 RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU
 (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
 (Euphorbiaceae macrocyclic diterpene for inflammation treatment)
 IT Eukaryota
 (PKC-dependent; Euphorbiaceae macrocyclic diterpene for inflammation
 treatment)
 IT Respiration, animal
 (burst; Euphorbiaceae macrocyclic diterpene for inflammation treatment)
 IT Ovary, neoplasm
 (carcinoma, inhibitors; Euphorbiaceae macrocyclic diterpene for
 inflammation treatment)
 IT Diterpenes
 RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU
 (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
 (esters; Euphorbiaceae macrocyclic diterpene for inflammation
 treatment)
 IT Gene
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (expression, PKC-dependent; Euphorbiaceae macrocyclic diterpene for
 inflammation treatment)
 IT Biological transport
 (intracellular, PKC; Euphorbiaceae macrocyclic diterpene for
 inflammation treatment)
 IT Eukaryota
 (lower; Euphorbiaceae macrocyclic diterpene for inflammation treatment)
 IT Antitumor agents

- (melanoma; Euphorbiaceae macrocyclic diterpene for inflammation treatment)
- IT Lymphocyte
(natural killer cell; Euphorbiaceae macrocyclic diterpene for inflammation treatment)
- IT Antitumor agents
(ovary carcinoma; Euphorbiaceae macrocyclic diterpene for inflammation treatment)
- IT Drug delivery systems
(tinctures, tincture; Euphorbiaceae macrocyclic diterpene for inflammation treatment)
- IT Cell differentiation
(to bipolar dendritic phenotype; Euphorbiaceae macrocyclic diterpene for inflammation treatment)
- IT Drug delivery systems
(topical; Euphorbiaceae macrocyclic diterpene for inflammation treatment)
- IT 16561-29-8, Pma 37558-16-0, Phorbol dibutyrate
141436-78-4, Protein kinase C
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Euphorbiaceae macrocyclic diterpene for inflammation treatment)
- IT 67707-88-4, Ingenane 67707-88-4D,
Ingenane, derivs. 75567-37-2 82425-35-2
210108-85-3, Jatrophone 1 210108-85-3D, Jatrophone 1,
derivs. 210108-86-4, Jatrophone 2 210108-86-4D,
Jatrophone 2, derivs. 210108-87-5, Jatrophone 3
210108-87-5D, Jatrophone 3, derivs. 210108-88-6,
Jatrophone 4 210108-88-6D, Jatrophone 4, derivs.
210108-89-7, Jatrophone 5 210108-89-7D, Jatrophone 5,
derivs. 210108-90-0, Jatrophone 6 210108-90-0D,
Jatrophone 6, derivs.
RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU
(Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(Euphorbiaceae macrocyclic diterpene for inflammation treatment)
- IT 107-95-9, .beta.-Alanine 515-25-3 590-46-5,
Betaine hydrochloride
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(carrier; Euphorbiaceae macrocyclic diterpene for inflammation treatment)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs hitstr ind 3

L4 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:903881 HCAPLUS

DOCUMENT NUMBER: 136:42795

TITLE: Macrocyclic diterpenes for treatment and prophylaxis of PKC-related conditions

INVENTOR(S): Aylward, James Harrison; Parsons, Peter Gordon; Suhrbier, Andreas; Turner, Kathleen Anne

PATENT ASSIGNEE(S): Peplin Research Pty. Ltd., Australia

SOURCE: PCT Int. Appl., 215 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001093884	A1	20011213	WO 2001-AU679	20010607
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 752462	B2	20020919	AU 2001-63661	20010607
PRIORITY APPLN. INFO.:			AU 2000-8017	A 20000607
			WO 2001-AU679	W 20010607

OTHER SOURCE(S): MARPAT 136:42795

AB The present invention relates generally to chem. agents useful in the treatment and prophylaxis of protein kinase C (PKC)-related conditions in mammals, including humans and primates, non-mammalian animals and avian species. More particularly, the present invention provides a chem. agent of the macrocyclic diterpene family obtainable from a member of the Euphorbiaceae family of plants or botanical or horticultural relatives thereof or derivs. or chem. analogs or chem. synthetic forms of the agents for use in the treatment or prophylaxis of PKC-related conditions in mammalian, animal and avian subjects. The subject chem. agents are also useful for modulating expression of genetic sequences including promotion and other regulatory sequences. The present invention further contemplates a method for the prophylaxis and/or treatment in mammalian, animal or avian subjects with PKC-related conditions by the topical or systemic administration of a macrocyclic diterpene obtainable from a member of the Euphorbiaceae family of plants or their botanical or horticultural derivs. or a deriv., chem. analog or chem. synthetic form of the agent. The chem. agent of the present invention may be in the form of a purified compd., mixt. of compds., a precursor form of one or more of the compds. capable of chem. transformation into a therapeutically and/or genetically active agent or in the form of a chem. fraction, sub-fraction, prepn. or ext. of the plant. For example, an exts. of Euphorbia peplus sap (PEP003) reduced replication kinetics of HIV-1 virus in infected T-cells in a dose dependent manner. PEP003 at concns. of 500, 50, and 5 nM reduced the replication rate by approx. 99.9%, 95% and 47%, resp., relative to untreated, infected cells. Also, diterpene esters obtained from E. peplus activated human peripheral blood leukocytes to produce, in

a PKC-dependent manner, phagocytosis and respiratory burst which are potentially lethal to microorganisms and other cells, e.g., tumor cells.

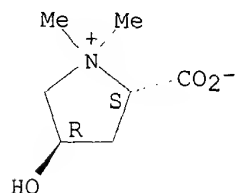
IT 515-25-3 6340-41-6

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(carrier; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)

RN 515-25-3 HCAPLUS

CN Pyrrolidinium, 2-carboxy-4-hydroxy-1,1-dimethyl-, inner salt, (2S,4R)-
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 6340-41-6 HCAPLUS

CN Ethanaminium, 2-carboxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

$\text{Me}_3^+\text{N}-\text{CH}_2-\text{CH}_2-\text{CO}_2\text{H}$

● Cl^-

IT 141436-78-4, Protein kinase C

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)

RN 141436-78-4 HCAPLUS

CN Kinase (phosphorylating), protein, C (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 67-56-1, Methanol, uses 141-78-6, Ethyl acetate, uses
9041-37-6, Sephadex LH 20 9060-05-3, Amberlite XAD-2
11104-40-8, Amberlite XAD-8 37380-42-0, Amberlite XAD-4
37380-43-1, Amberlite XAD-7 104219-63-8, Amberlite
XAD-16

RL: NUU (Other use, unclassified); USES (Uses)
(isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)

RN 67-56-1 HCAPLUS

CN Methanol (8CI, 9CI) (CA INDEX NAME)

$\text{H}_3\text{C}-\text{OH}$

RN 141-78-6 HCAPLUS

CN Acetic acid ethyl ester (8CI, 9CI) (CA INDEX NAME)

Et--O--Ac

RN 9041-37-6 HCAPLUS

CN Sephadex LH 20 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9060-05-3 HCAPLUS

CN Amberlite XAD 2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 11104-40-8 HCAPLUS

CN Amberlite XAD 8 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 37380-42-0 HCAPLUS

CN Amberlite XAD 4 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 37380-43-1 HCAPLUS

CN Amberlite XAD 7 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 104219-63-8 HCAPLUS

CN Amberlite XAD 16 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 67707-88-4P, Ingenane 82425-35-2P

210108-85-3P, Jatrophane 1 210108-86-4P, Jatrophane 2

210108-87-5P, Jatrophane 3 210108-88-6P, Jatrophane 4

210108-89-7P, Jatrophane 5 210108-90-0P, Jatrophane 6

210108-91-1P, Pepluane 214900-78-4DP, derivs.

RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU

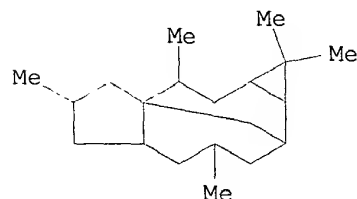
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)

(isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)

RN 67707-88-4 HCAPLUS

CN 1H-2,8a-Methanocyclopenta[a]cyclopropa[e]cyclodecene, dodecahydro-1,1,4,7,9-pentamethyl-, (1aS,2R,4R,5aR,7R,8aR,9R,10aR)- (9CI) (CA INDEX NAME)



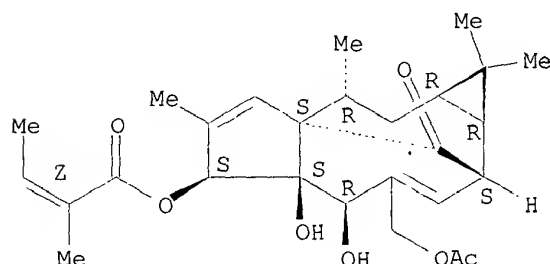
RN 82425-35-2 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-4-

[(acetyloxy)methyl]-1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-1,1,7,9-

tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-yl ester, (2Z)- (9CI) (CA INDEX NAME)

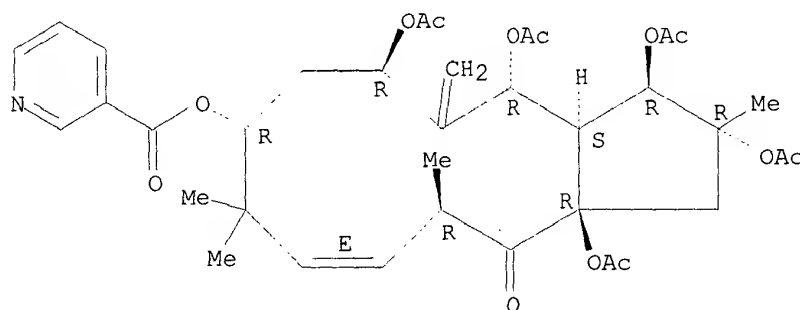
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 210108-85-3 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6R,8R,10E,12R,13aR)-2,3,4,6,13a-pentakis(acetyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-2,9,9,12-tetramethyl-5-methylene-13-oxo-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

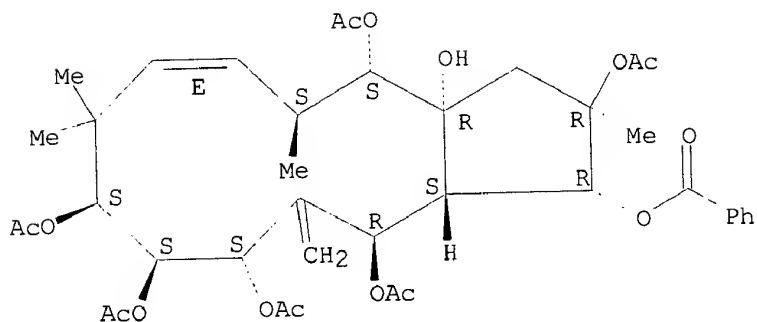
Absolute stereochemistry. Rotation (-).
Double bond geometry as described by E or Z.



RN 210108-86-4 HCAPLUS

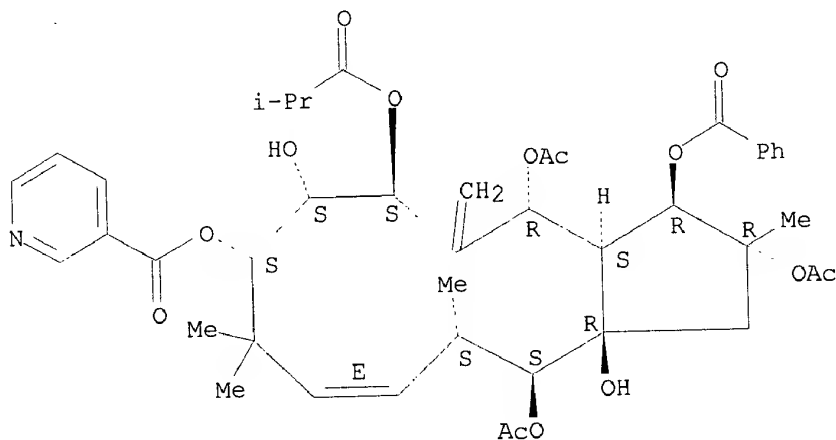
CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol, 1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-2,4,9,10,11,13-hexaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13R,13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as described by E or Z.



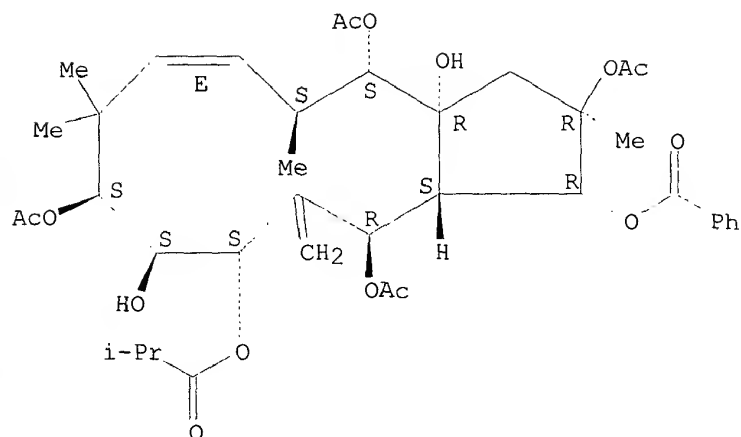
RN 210108-87-5 HCAPLUS
 CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,13-tris(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-6-(2-methyl-1-oxopropoxy)-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
 Double bond geometry as described by E or Z.



RN 210108-88-6 HCAPLUS
 CN Propanoic acid, 2-methyl-, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,8,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-cyclopentacyclododecen-6-yl ester (9CI) (CA INDEX NAME)

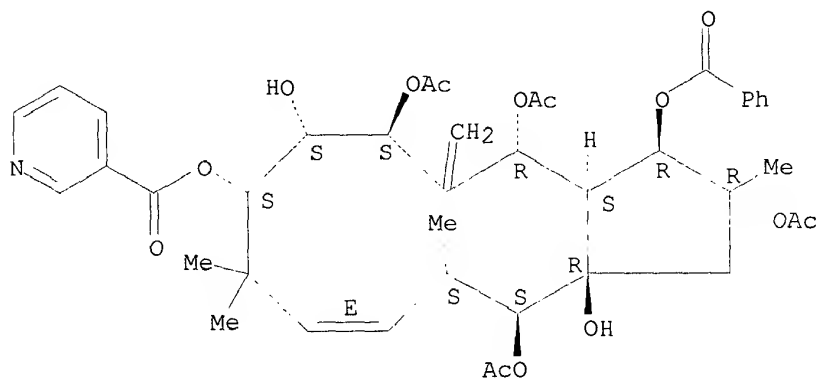
Absolute stereochemistry. Rotation (+).
 Double bond geometry as described by E or Z.



RN 210108-89-7 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,6,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

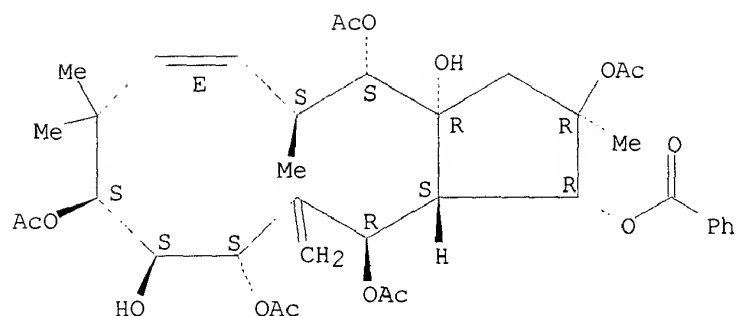
Absolute stereochemistry. Rotation (+).
Double bond geometry as described by E or Z.



RN 210108-90-0 HCAPLUS

CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol, 1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-2,4,9,11,13-pentaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13R,13aS)- (9CI) (CA INDEX NAME)

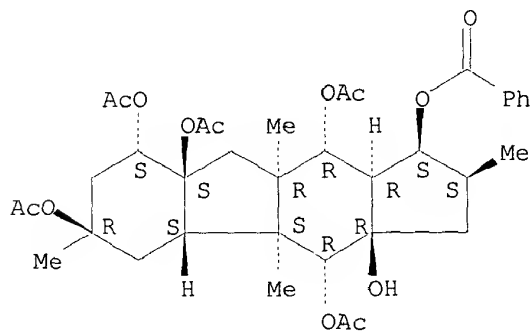
Absolute stereochemistry.
Double bond geometry as described by E or Z.



RN 210108-91-1 HCAPLUS

CN Cyclopenta[b]fluorene-1,3a,4,6,8,8a,10(1H,4H)-heptol, dodecahydro-2,4a,6,9a-tetramethyl-, 4,6,8,8a,10-pentaacetate 1-benzoate, (1S,2S,3aR,4R,4aS,4bS,6R,8R,8aR,9aR,10R,10aR)- (9CI) (CA INDEX NAME)

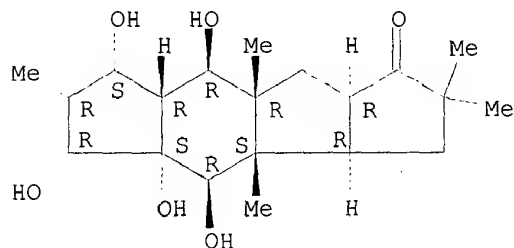
Absolute stereochemistry.



RN 214900-78-4 HCAPLUS

CN 1H-Cyclopenta[a]-s-indacen-1-one, tetradeca-hydro-4,4a,5,7,8-pentahydroxy-2,2,3b,6,8a-pentamethyl-, (3aR,3bS,4R,4aS,5R,6R,7S,7aR,8R,8aR,9aR)-rel-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.



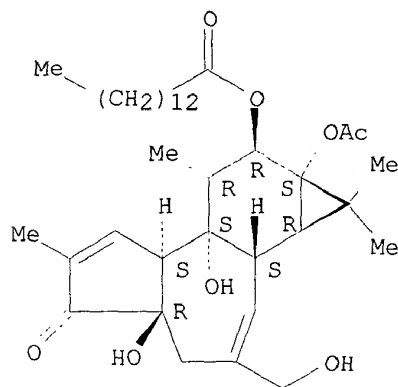
IT 16561-29-8, TPA (phorbol derivative)

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(isolation of macrocyclic diterpenes from Euphorbiaceae and related plants with less tumor promoting capacity than TPA for treatment and prophylaxis of protein kinase C-related conditions)

RN 16561-29-8 HCAPLUS

CN Tetradecanoic acid, (1aR,1bS,4aR,7aS,7bS,8R,9R,9aS)-9a-(acetyloxy)-
1a,1b,4,4a,5,7a,7b,8,9,9a-decahydro-4a,7b-dihydroxy-3-(hydroxymethyl)-
1,1,6,8-tetramethyl-5-oxo-1H-cyclopropa[3,4]benz[1,2-e]azulen-9-yl ester
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM A61K035-78
ICS A61K031-455; A61K031-22; A61P031-02; G06F019-00
CC 63-4 (Pharmaceuticals)
Section cross-reference(s): 1, 11, 62
ST macrocyclic diterpene Euphorbiaceae antiinflammatory immunostimulant;
protein kinase C macrocyclic diterpene antiinflammatory immunostimulant
IT Antitumor agents
(Burkitt's lymphoma; isolation of macrocyclic diterpenes from
Euphorbiaceae and related plants for treatment and prophylaxis of
protein kinase C-related conditions)
IT Leukocyte
(activation; isolation of macrocyclic diterpenes from Euphorbiaceae and
related plants for treatment and prophylaxis of protein kinase
C-related conditions)
IT Skin, neoplasm
(basal cell carcinoma, inhibitors; isolation of macrocyclic diterpenes
from Euphorbiaceae and related plants for treatment and prophylaxis of
protein kinase C-related conditions)
IT Antitumor agents
(basal cell carcinoma; isolation of macrocyclic diterpenes from
Euphorbiaceae and related plants for treatment and prophylaxis of
protein kinase C-related conditions)
IT Diptera
(blood-sucking, sand, bites, treatment of; isolation of macrocyclic
diterpenes from Euphorbiaceae and related plants for treatment and
prophylaxis of protein kinase C-related conditions)
IT Respiration, animal
(burst, induction of, in peripheral mononuclear cells; isolation of
macrocyclic diterpenes from Euphorbiaceae and related plants for
treatment and prophylaxis of protein kinase C-related conditions)
IT Ovary, neoplasm
(carcinoma, inhibitors; isolation of macrocyclic diterpenes from
Euphorbiaceae and related plants for treatment and prophylaxis of
protein kinase C-related conditions)
IT Polymers, uses
RL: NUU (Other use, unclassified); USES (Uses)

- (co-, arom.; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Drug screening
(computer program for; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Diterpenes
RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(esters; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Gene
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(expression, protein kinase C-dependent; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Computer program
(for drug screening; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Drug delivery systems
(gels; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Cell differentiation
(inducers; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Neutrophil
(induction of invasion of, in skin; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Mononuclear cell (leukocyte)
(induction of respiratory burst in; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Peritoneum
(infection, streptococcal; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Skin, disease
(infection; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Skin, neoplasm
(inhibitors; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Skin, disease
(insect bite, treatment of; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Acalypha
Acidoton
Actinostemon
Adelia
Adenocline

Adenocrepis
Adenophaedra
Adenoviridae
Adisca
Agrostistachys
Alchornea
Alchorneopsis
Alcinaeanthus
Alcoceria
Aleurites
Alphavirus
Amanoa
Ameba
Andrachne
Angostyles
Animal virus
Anisophyllum
Anthelmintics
Anti-inflammatory agents
Antibacterial agents
Antidesma
Antimicrobial agents
Antitumor agents
Antiviral agents
Aphora
Apoptosis
Aporosa
Aporosella
Arachnida
Arbovirus
Argythamnia
Aspergillus
Astrococcus
Astrogyne
Aves
Baccaurea
Bacillus (bacterium genus)
Bacillus anthracis
Balantidium coli
Baliospermum
Bernardia
Beyeriopsis
Bischofia
Blachia
Blastomyces dermatitidis
Blumeodondron
Bonania
Bordetella
Bordetella pertussis
Borrelia
Borrelia burgdorferi
Bradleia
Breynia
Breyniopsis
Briedelia
Buraeavia
Caletia
Candida albicans
Caperonia
Caryodendron

Celianella
Cephalocroton
Chaenotheca
Chaetocarpus
Cheilosa
Chiropetalum
Chlamydia
Chlamydia trachomatis
Choriophyllum
Cicca
Claoxylon
Cleidion
Cleistanthus
Clostridium
Clostridium botulinum
Clostridium perfringens
Clostridium tetani
Clutia
Cnesmone
Cnidoscolus
Coccoceras
Codiaeum
Coelodiscus
Conami
Conceveiba
Conceveibastrum
Conceveibum
Corynebacterium
Corynebacterium diphtheriae
Corythea
Cosmetics
Croizatia
Croton
Crotonopsis
Crozophora
Cryptococcus neoformans
Cryptosporidium
Cubanthus
Cunuria
Cytomegalovirus
Dactylostemon
Dalechampia
Dendrocousinsia
Diasperus
Didymocistus
Dimorphocalyx
Discocarpus
Ditaxis
Dodecastigma
Drug delivery systems
Drypetes
Dysopsis
Elateriospermum
Endadenium
Endospermum
Entamoeba histolytica
Epidermophyton
Erismanthus
Erythrocarpus
Erythrochilus

Escherichia
Escherichia coli
Eukaryota
Eumecanthus
Euphorbia
Euphorbia aaron-rossii
Euphorbia abbreviata
Euphorbia acuta
Euphorbia alatocaulis
Euphorbia albicaulis
Euphorbia albomarginata
Euphorbia alicae
Euphorbia alta
Euphorbia anacampseros
Euphorbia andromedae
Euphorbia angusta
Euphorbia anthonyi
Euphorbia antiguensis
Euphorbia apocynifolia
Euphorbia arabica
Euphorbia ariensis
Euphorbia arizonica
Euphorbia arkansana
Euphorbia arteagae
Euphorbia arundelana
Euphorbia astroites
Euphorbia atrococca
Euphorbia baselices
Euphorbia batabanensis
Euphorbia bergeri
Euphorbia bermudiana
Euphorbia bicolor
Euphorbia biformis
Euphorbia bifurcata
Euphorbia bilobata
Euphorbia biramensis
Euphorbia biuncialis
Euphorbia blepharostipula
Euphorbia blodgetti
Euphorbia boerhaavioides
Euphorbia boliviana
Euphorbia bracei
Euphorbia brachiata
Euphorbia brachycera
Euphorbia brandegeei
Euphorbia brittonii
Euphorbia caesia
Euphorbia calcicola
Euphorbia campestris
Euphorbia candelabrum
Euphorbia capitellata
Euphorbia carmenensis
Euphorbia carunculata
Euphorbia cayensis
Euphorbia celastroides
Euphorbia chalicophila
Euphorbia chamaerhodos
Euphorbia chamaesula
Euphorbia chiapensis
Euphorbia chiogenoides

Euphorbia cinerascens
Euphorbia clarionensis
Euphorbia colimae
Euphorbia colorata
Euphorbia commutata
Euphorbia consoquitlae
Euphorbia convolvuloides
Euphorbia corallifera
Euphorbia creberrima
Euphorbia crenulata
Euphorbia cubensis
Euphorbia cuspidata
Euphorbia cymbiformis
Euphorbia darlingtonii
Euphorbia defoliata
Euphorbia degeneri
Euphorbia deltoidea
Euphorbia dentata
Euphorbia depressa
Euphorbia dictyosperma
Euphorbia dioeca
Euphorbia discoidalis
Euphorbia dorsiventralis
Euphorbia drummondii
Euphorbia duclouxii
Euphorbia dussii
Euphorbia eanophylla
Euphorbia eggersii
Euphorbia eglandulosa
Euphorbia elata
Euphorbia enalla
Euphorbia eriogonoides
Euphorbia eriophylla
Euphorbia esculaeformis
Euphorbia espirituensis
Euphorbia esula
Euphorbia excisa
Euphorbia exclusiva
Euphorbia exstipitata
Euphorbia exstipulata
Euphorbia fendleri
Euphorbia filicaulis
Euphorbia filiformis
Euphorbia florida
Euphorbia fruticulosa
Euphorbia garberi
Euphorbia gaumerii
Euphorbia gerardiana
Euphorbia geyeri
Euphorbia glyptosperma
Euphorbia gorgonis
Euphorbia gracilior
Euphorbia gracillima
Euphorbia gradyi
Euphorbia graminea
Euphorbia grisea
Euphorbia guadalajarana
Euphorbia guanarensis
Euphorbia gymnadenia
(isolation of macrocyclic diterpenes from Euphorbiaceae and related

plants for treatment and prophylaxis of protein kinase C-related conditions)

IT Euphorbia haematantha
Euphorbia hedyotoides
Euphorbia heldrichii
Euphorbia helenae
Euphorbia helleri
Euphorbia helwigii
Euphorbia henricksonii
Euphorbia heterophylla
Euphorbia hexagona
Euphorbia hexagonoides
Euphorbia hinkleyorum
Euphorbia hintonii
Euphorbia hirta
Euphorbia hirtula
Euphorbia hooveri
Euphorbia humistrata
Euphorbia hypericifolia
Euphorbia inundata
Euphorbia involuta
Euphorbia jaliscensis
Euphorbia jejuna
Euphorbia johnstonii
Euphorbia juttiae
Euphorbia knuthii
Euphorbia lasiocarpa
Euphorbia lata
Euphorbia latazi
Euphorbia latericolor
Euphorbia laxiflora
Euphorbia lecheoides
Euphorbia ledienii
Euphorbia leucophylla
Euphorbia lineata
Euphorbia linguiformis
Euphorbia longecornuta
Euphorbia longepetiolata
Euphorbia longeramosa
Euphorbia longinsulicola
Euphorbia longipila
Euphorbia lupulina
Euphorbia lurida
Euphorbia lycioides
Euphorbia macropodoides
Euphorbia macvaughiana
Euphorbia manca
Euphorbia mandoniana
Euphorbia mangleti
Euphorbia mango
Euphorbia marylandica
Euphorbia mayana
Euphorbia melanadenia
Euphorbia melanocarpa
Euphorbia meridensis
Euphorbia mertonii
Euphorbia mexiae
Euphorbia microcephala
Euphorbia microclada
Euphorbia micromera

Euphorbia misella
Euphorbia missurica
Euphorbia montana
Euphorbia montereyana
Euphorbia multicaulis
Euphorbia multiformis
Euphorbia multinodis
Euphorbia multiseta
Euphorbia muscicola
Euphorbia neomexicana
Euphorbia nephradenia
Euphorbia niqueroana
Euphorbia oaxacana
Euphorbia occidentalis
Euphorbia odontodenia
Euphorbia olivacea
Euphorbia olowaluana
Euphorbia ophthalmica
Euphorbia ovata
Euphorbia pachypoda
Euphorbia pachyrhiza
Euphorbia padifolia
Euphorbia palmeri
Euphorbia paludicola
Euphorbia parishii
Euphorbia parryi
Euphorbia parviflora
Euphorbia paxiana
Euphorbia pediculifera
Euphorbia peplidion
Euphorbia peploides
Euphorbia peplus
Euphorbia pergamena
Euphorbia perlignea
Euphorbia petaloidea
Euphorbia petrina
Euphorbia picachensis
Euphorbia pilosula
Euphorbia pinariona
Euphorbia pinctorum
Euphorbia pionsperma
Euphorbia platysperma
Euphorbia plicata
Euphorbia poeppigii
Euphorbia poliosperma
Euphorbia polycarpa
Euphorbia polycnemoides
Euphorbia polyphylla
Euphorbia portoricensis
Euphorbia portulacoides
Euphorbia portulana
Euphorbia preslii
Euphorbia prostrata
Euphorbia pteroneura
Euphorbia pycnanthema
Euphorbia ramosa
Euphorbia ramosa
Euphorbia rapulum
Euphorbia remyi
Euphorbia retroscabra

Euphorbia revoluta
Euphorbia rivularis
Euphorbia robusta
Euphorbia rubida
Euphorbia rubrosperma
Euphorbia rupicola
Euphorbia sanmartensis
Euphorbia saxatilis
Euphorbia schizoloba
Euphorbia sclerocyathium
Euphorbia scopulorum
Euphorbia senilis
Euphorbia serpyllifolia
Euphorbia serrula
Euphorbia setiloba
Euphorbia sonorae
Euphorbia soobyi
Euphorbia sparsiflora
Euphorbia sphaerosperma
Euphorbia spruceana
Euphorbia stellata
Euphorbia subcoerulea
Euphorbia submammilaris
Euphorbia subpeltata
Euphorbia subpubens
Euphorbia subreniforme
Euphorbia subtrifoliata
Euphorbia succedanea
Euphorbia syphilitica
Euphorbia tamaulipasana
Euphorbia telephioides
Euphorbia tenuissima
Euphorbia tetrapora
Euphorbia tirucalli
Euphorbia tomentella
Euphorbia tomentosa
Euphorbia torralbasii
Euphorbia towarensis
Euphorbia trachysperma
Euphorbia tricolor
Euphorbia troyana
Euphorbia tuerckheimii
Euphorbia turczaninowii
Euphorbia umbellulata
Euphorbia undulata
Euphorbia vermiformis
Euphorbia versicolor
Euphorbia villifera
Euphorbia violacea
Euphorbia whitei
Euphorbia xanti
Euphorbia xylopoda
Euphorbia yayalesia
Euphorbia yungasensis
Euphorbia zeravschanica
Euphorbia zinniiflora
Euphorbiaceae
Excoecaria
Fluggea

Fungi
Fungicides
Garcia
Gavarretia
Gelonium
Gene therapy
Giardia lamblia
Givotia
Glochidion
Glochidionopsis
Glycydendron
Gymnanthes
Gymnosporia
Haematospermum
Haemophilus
Haemophilus influenzae
Hendecandras
Hepatitis A virus
Hepatitis B virus
Hepatitis C virus
Hevea
Hieronima
Hippocrepantha
Histoplasma capsulatum
Homalanthus
Human
Human T-lymphotropic virus 1
Human T-lymphotropic virus 2
Human adenovirus 5
Human herpesvirus
Human herpesvirus 3
Human herpesvirus 4
Human immunodeficiency virus 1
Human poliovirus
Hymenocardia
Immunostimulants
Influenza A virus
Influenza B virus
Insecta
Janipha
Jatropha
Julocroton
Klebsiella
Klebsiella pneumoniae
Lasiocroton
Legionella
Legionella pneumophila
Leiocarpus
Leishmania
Leonardia
Lepidanthus
Leucocroton
Listeria
Listeria monocytogenes
Mabea
Macaranga
Macrocroton
Mallotus (plant)
Mammalia
Manihot

Mappa
 Maprounea
 Measles virus
 Melanthesa
 Mercurialis
 Mettenia
 (isolation of macrocyclic diterpenes from Euphorbiaceae and related
 plants for treatment and prophylaxis of protein kinase C-related
 conditions)

IT Micrandra
 Microdesmis
 Microelus
 Microsporum
 Microstachys
 Monadenium
 Mozinna
 Mumps virus
 Mycobacterium
 Mycobacterium leprae
 Mycobacterium tuberculosis
 Mycoplasma
 Mycoplasma pneumoniae
 Neisseria
 Neisseria gonorrhoeae
 Neisseria meningitidis
 Nematoda
 Neoscortechinia
 Omalanthus
 Omphalea
 Ophellantha
 Orbicularia
 Ostodes
 Oxydectes
 Palenga
 Pantadenia
 Papovaviridae
 Paradrypetes
 Parasitocides
 Pausandra
 Pedilanthus
 Pera
 Peridium
 Petalostigma
 Phyllanthus
 Picrodendron
 Pierardia
 Pilinophytum
 Pimeleodendron
 Piranhea
 Platygyne
 Plukenetia
 Pneumocystis carinii
 Podocalyx
 Poinsettia
 Poraresia
 Poxviridae
 Primates
 Prokaryote
 Propionibacterium
 Propionibacterium acnes

Prosartema
Pseudanthus
Pycnocomma
Quadrasia
Rabies virus
Reverchonia
Rhinovirus
Richeria
Richieriella
Ricinella
Ricinocarpos
Rickettsia
Rickettsia rickettsi
Rottlera
Rubella virus
Sagotia
Salmonella
Salmonella typhi
Salmonella typhimurium
Sandwithia
Sapium
Savia
Sclerocroton
Sebastiania
Securinega
Senefeldera
Senefelderopsis
Serophyton
Shigella
Shigella dysenteriae
Siphonia
Skin preparations (pharmaceutical)
Spathiostemon
Spixia
Staphylococcus
Staphylococcus aureus
Stillingia
Streptococcus
Streptococcus pneumoniae
Streptococcus pyogenes
Strophoblachia
Synadenium
Tetracoccus
Tetraplandra
Tetrorchidium
Thyrsanthera
Tithymalus
Toxoplasma gondii
Tragia
Treponema
Treponema pallidum
Trewia
Trichomonas vaginalis
Trichophyton
Trichophyton mentagrophytes mentagrophytes
Trigonostemon
Trypanosoma cruzi
Trypanosoma gambiense
Tyria
Ureaplasma

- Ureaplasma parvum
- Vaccinia virus
- Variola virus
- Venoms
- Vibrio
- Vibrio cholerae
- Worm
- Xylophylla
- Yeast
- Yersinia
- Yersinia pestis
 - (isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Toxins
 - RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Alcohols, uses
 - RL: NUU (Other use, unclassified); USES (Uses) (isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Amides, uses
 - RL: NUU (Other use, unclassified); USES (Uses) (isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Ethers, uses
 - RL: NUU (Other use, unclassified); USES (Uses) (isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Ketones, uses
 - RL: NUU (Other use, unclassified); USES (Uses) (isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Cell activation
 - (leukocyte; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Diterpenes
 - RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (macrocyclic; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Antitumor agents
 - (melanoma; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Lymphocyte
 - (natural killer cell, stimulation of; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Skin
 - (neutrophil invasion in, induction of; isolation of macrocyclic

- diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Adsorbents
(nonionic porous; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Animal
(nonmammalian; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Drug delivery systems
(ointments, creams; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Solvents
(org.; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Antitumor agents
(ovary carcinoma; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Virus vectors
(promoters; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Tinea (skin disease)
(ringworm; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Culicidae
(skin bites, treatment of; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Antitumor agents
(skin; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Phagocytosis
(stimulation of; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Organic compounds, uses
RL: NUU (Other use, unclassified); USES (Uses)
(sulfur-contg.; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Drug delivery systems
(tinctures; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT Drug delivery systems
(topical; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)
- IT 515-25-3 6340-41-6
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(carrier; isolation of macrocyclic diterpenes from Euphorbiaceae and related plants for treatment and prophylaxis of protein kinase C-related conditions)

- IT 141436-78-4, Protein kinase C
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (isolation of macrocyclic diterpenes from Euphorbiaceae and related
 plants for treatment and prophylaxis of protein kinase C-related
 conditions)
- IT 67-56-1, Methanol, uses 141-78-6, Ethyl acetate, uses
 9041-37-6, Sephadex LH 20 9060-05-3, Amberlite XAD-2
 11104-40-8, Amberlite XAD-8 37380-42-0, Amberlite XAD-4
 37380-43-1, Amberlite XAD-7 104219-63-8, Amberlite
 XAD-16
 RL: NUU (Other use, unclassified); USES (Uses)
 (isolation of macrocyclic diterpenes from Euphorbiaceae and related
 plants for treatment and prophylaxis of protein kinase C-related
 conditions)
- IT 67707-88-4P, Ingenane 82425-35-2P
 210108-85-3P, Jatrophane 1 210108-86-4P, Jatrophane 2
 210108-87-5P, Jatrophane 3 210108-88-6P, Jatrophane 4
 210108-89-7P, Jatrophane 5 210108-90-0P, Jatrophane 6
 210108-91-1P, Pepluane 214900-78-4DP, derivs.
 RL: PAC (Pharmacological activity); PUR (Purification or recovery); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)
 (isolation of macrocyclic diterpenes from Euphorbiaceae and related
 plants for treatment and prophylaxis of protein kinase C-related
 conditions)
- IT 16561-29-8, TPA (phorbol derivative)
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (isolation of macrocyclic diterpenes from Euphorbiaceae and related
 plants with less tumor promoting capacity than TPA for treatment and
 prophylaxis of protein kinase C-related conditions)
- REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L4 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:903879 HCAPLUS

DOCUMENT NUMBER: 136:31656

TITLE: Euphorbiaceae macrocyclic diterpenes for the treatment of infection and PKC-related conditions

INVENTOR(S): Aylward, James Harrison; Parsons, Peter Gordon; Suhrbier, Andreas; Turner, Kathleen Anne

PATENT ASSIGNEE(S): Peplin Research Pty. Ltd., Australia

SOURCE: PCT Int. Appl., 179 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

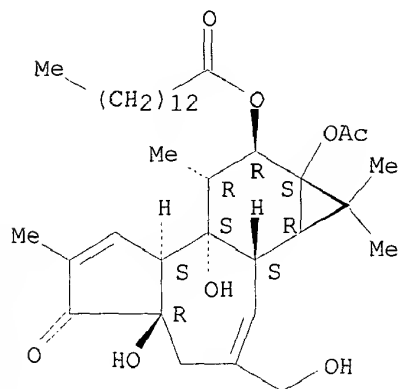
FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001093883	A1	20011213	WO 2001-AU678	20010607
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 748542	B2	20020606	AU 2001-73732	20010607
PRIORITY APPLN. INFO.:			AU 2000-8017	A 20000607
			WO 2001-AU678	W 20010607
OTHER SOURCE(S): MARPAT 136:31656				
AB	The invention relates generally to chem. agents useful in the treatment and prophylaxis of infection by pathogenic or potentially pathogenic entities, or entities capable of opportunistic infection in mammals, including humans and primates, non-mammalian animals and avian species. More particularly, the invention provides a chem. agent of the macrocyclic diterpene family obtainable from a member of the Euphorbiaceae family of plants or botanical or horticultural relatives thereof or derivs. or chem. analogs or chem. synthetic forms of the agents for use in the treatment or prophylaxis of infection by pathogenic entities in mammalian, animal and avian subjects. The invention further provides a method for the prophylaxis and/or treatment in mammalian, animal or avian subjects of infection or potential infection by pathogenic entities by the topical or systemic administration of a macrocyclic diterpene obtainable from a member of the Euphorbiaceae family of plants or their botanical or horticultural derivs. or a deriv., chem. analog or chem. synthetic form of the agent. The chem. agent of the invention may be in the form of a purified compd., mixt. of compds., a precursor form of one or more of the compds. capable of chem. transformation into a therapeutically active agent or in the form of a chem. fraction, subfraction, prepn. or ext. of the plant.			
IT	16561-29-8, Pma 37558-16-0, Phorbol dibutyrate 141436-78-4, Protein kinase C			
RL:	BSU (Biological study, unclassified); BIOL (Biological study) (Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)			
RN	16561-29-8 HCAPLUS			

CN Tetradecanoic acid, (1aR,1bS,4aR,7aS,7bS,8R,9R,9aS)-9a-(acetyloxy)-1a,1b,4,4a,5,7a,7b,8,9,9a-decahydro-4a,7b-dihydroxy-3-(hydroxymethyl)-1,1,6,8-tetramethyl-5-oxo-1H-cyclopropa[3,4]benz[1,2-e]azulen-9-yl ester (9CI) (CA INDEX NAME)

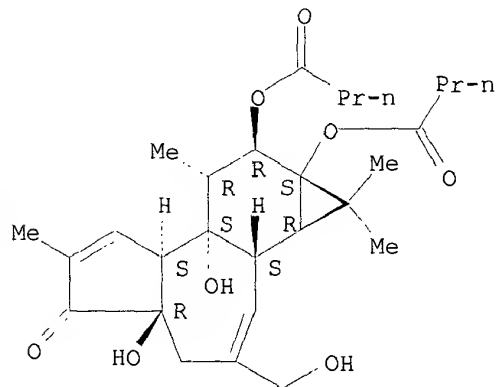
Absolute stereochemistry.



RN 37558-16-0 HCAPLUS

CN Butanoic acid, (1aR,1bS,4aR,7aS,7bS,8R,9R,9aS)-1,1a,1b,4,4a,5,7a,7b,8,9-decahydro-4a,7b-dihydroxy-3-(hydroxymethyl)-1,1,6,8-tetramethyl-5-oxo-9aH-cyclopropa[3,4]benz[1,2-e]azulene-9,9a-diyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 141436-78-4 HCAPLUS

CN Kinase (phosphorylating), protein, C (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

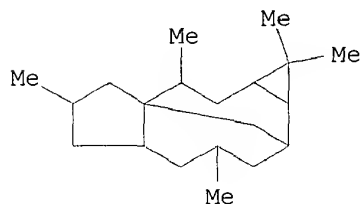
IT 67707-88-4, Ingenane 67707-88-4D,
Ingenane, derivs. 75567-37-2 82425-35-2
210108-85-3, Jatrophane 1 210108-85-3D, Jatrophane 1,
derivs. 210108-86-4, Jatrophane 2 210108-86-4D,
Jatrophane 2, derivs. 210108-87-5, Jatrophane 3
210108-87-5D, Jatrophane 3, derivs. 210108-88-6,
Jatrophane 4 210108-88-6D, Jatrophane 4, derivs.
210108-89-7, Jatrophane 5 210108-89-7D, Jatrophane 5,

derivs. 210108-90-0, Jatrophane 6 210108-90-0D,
Jatrophane 6, derivs.

RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU
(Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(Euphorbiaceae macrocyclic diterpene for treatment of infection and
PKC-related conditions)

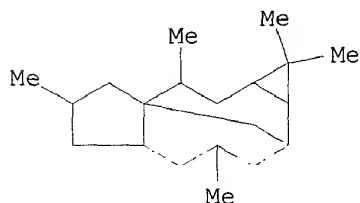
RN 67707-88-4 HCAPLUS

CN 1H-2,8a-Methanocyclopenta[a]cyclopropa[e]cyclodecene, dodecahydro-
1,1,4,7,9-pentamethyl-, (1aS,2R,4R,5aR,7R,8aR,9R,10aR)- (9CI) (CA INDEX
NAME)



RN 67707-88-4 HCAPLUS

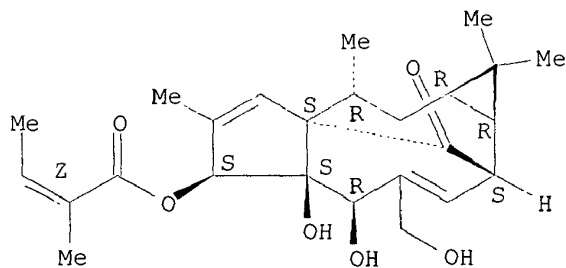
CN 1H-2,8a-Methanocyclopenta[a]cyclopropa[e]cyclodecene, dodecahydro-
1,1,4,7,9-pentamethyl-, (1aS,2R,4R,5aR,7R,8aR,9R,10aR)- (9CI) (CA INDEX
NAME)



RN 75567-37-2 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-
1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-4-(hydroxymethyl)-1,1,7,9-
tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-
yl ester, (2Z)- (9CI) (CA INDEX NAME)

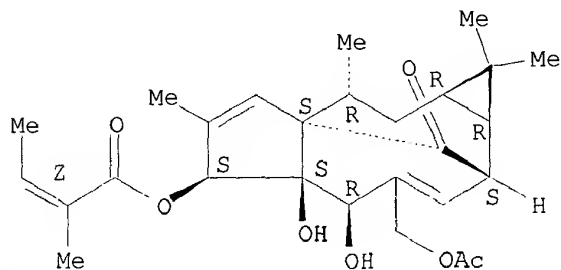
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 82425-35-2 HCAPLUS

CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-4-
[(acetyloxy)methyl]-1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-1,1,7,9-
tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-
yl ester, (2Z)- (9CI) (CA INDEX NAME)

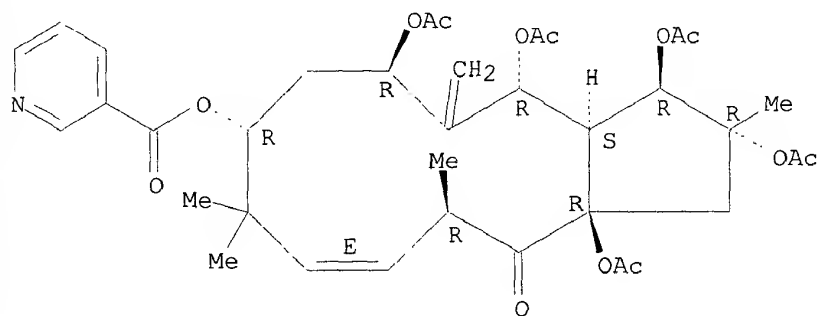
Absolute stereochemistry. Rotation (+).
Double bond geometry as shown.



RN 210108-85-3 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6R,8R,10E,12R,13aR)-2,3,4,6,13a-
pentakis(acetyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-2,9,9,12-
tetramethyl-5-methylene-13-oxo-1H-cyclopentacyclododecen-8-yl ester (9CI)
(CA INDEX NAME)

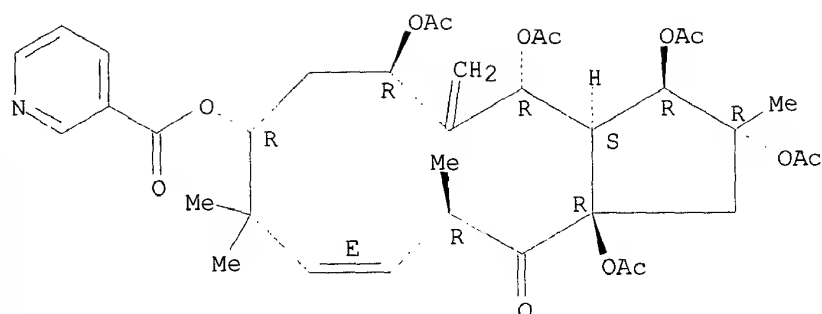
Absolute stereochemistry. Rotation (-).
Double bond geometry as described by E or Z.



RN 210108-85-3 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6R,8R,10E,12R,13aR)-2,3,4,6,13a-
pentakis(acetyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-2,9,9,12-
tetramethyl-5-methylene-13-oxo-1H-cyclopentacyclododecen-8-yl ester (9CI)
(CA INDEX NAME)

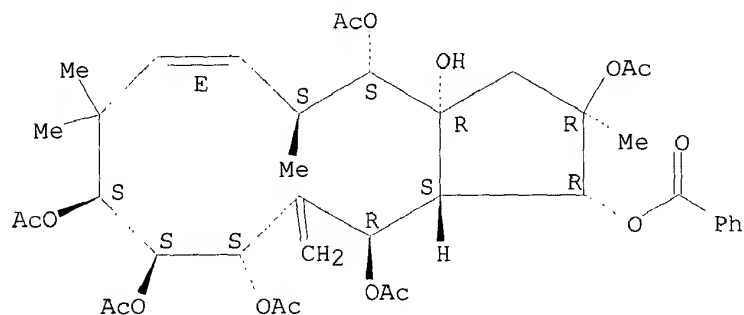
Absolute stereochemistry. Rotation (-).
Double bond geometry as described by E or Z.



RN 210108-86-4 HCAPLUS

CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,
1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-
, 2,4,9,10,11,13-hexaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13
R,13aS)- (9CI) (CA INDEX NAME)

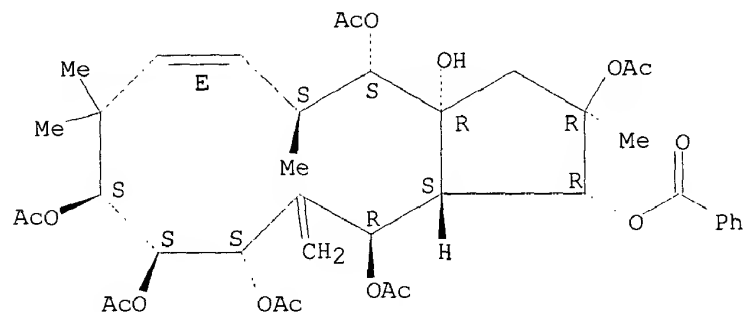
Absolute stereochemistry. Rotation (-).
Double bond geometry as described by E or Z.



RN 210108-86-4 HCAPLUS

CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,
1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-
, 2,4,9,10,11,13-hexaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13
R,13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as described by E or Z.

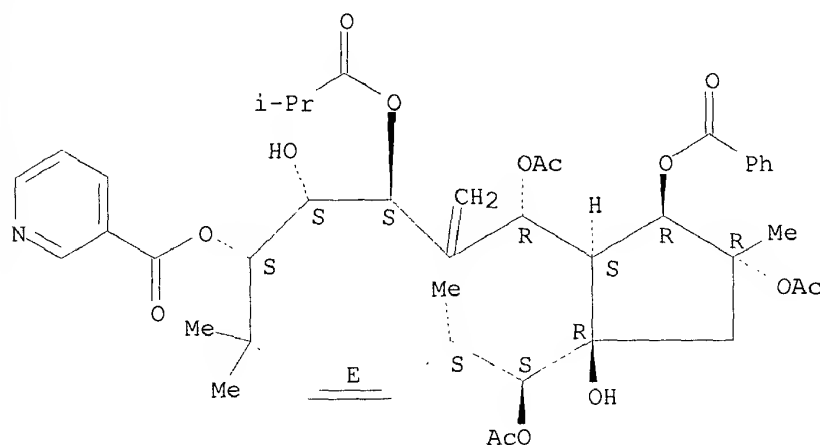


RN 210108-87-5 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,13-tris(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-6-(2-methyl-1-oxopropoxy)-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Double bond geometry as described by E or Z.

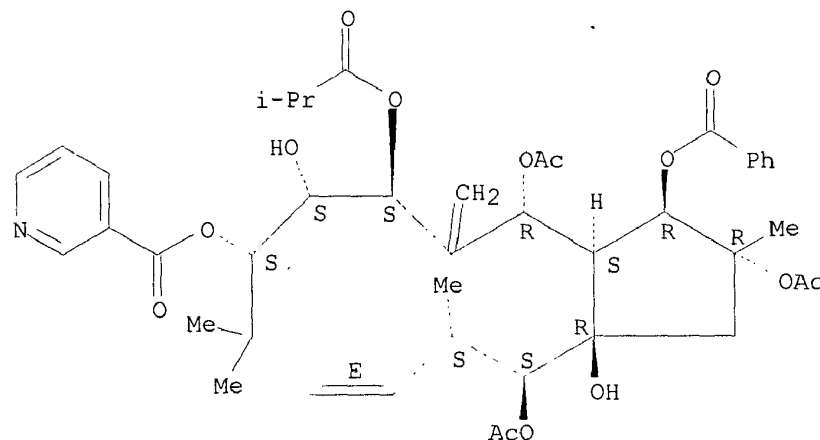


RN 210108-87-5 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,13-tris(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-6-(2-methyl-1-oxopropoxy)-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

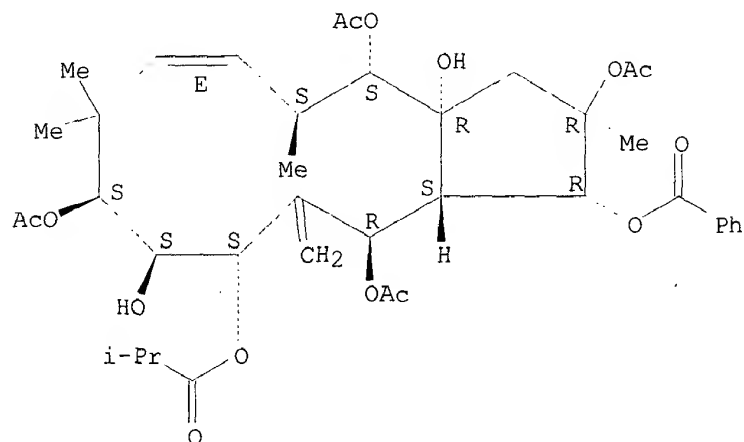
Double bond geometry as described by E or Z.



RN 210108-88-6 HCAPLUS

Propanoic acid, 2-methyl-, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-
2,4,8,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-
dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-
cyclopentacyclododecen-6-yl ester (9CI) (CA INDEX NAME)

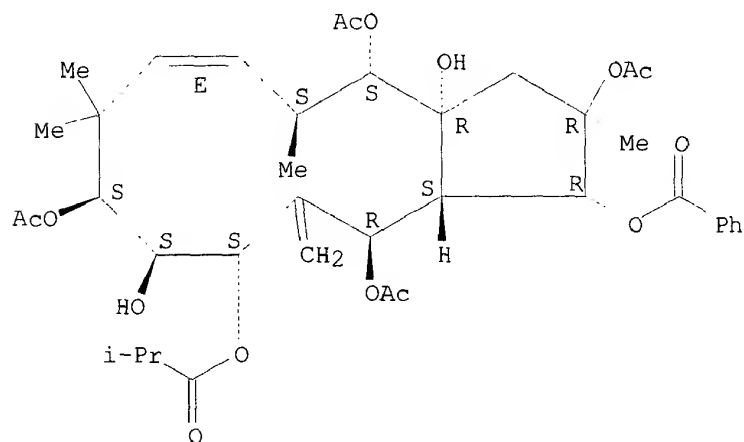
Absolute stereochemistry. Rotation (+).
Double bond geometry as described by E or Z.



RN 210108-88-6 HCAPLUS

CN Propanoic acid, 2-methyl-, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-
2,4,8,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-
dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-
cyclopentacyclododecen-6-yl ester (9CI) (CA INDEX NAME)

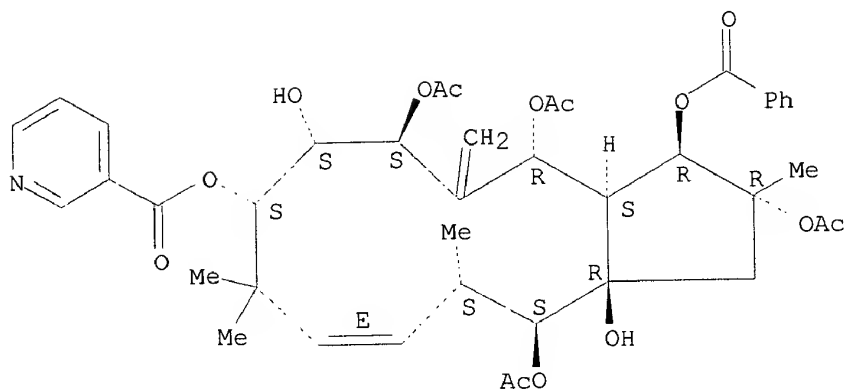
Absolute stereochemistry. Rotation (+).
Double bond geometry as described by E or Z.



RN 210108-89-7 HCAPLUS

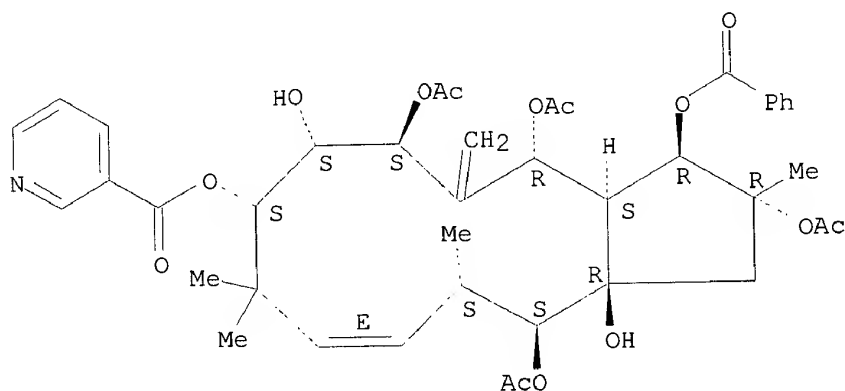
CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-
2,4,6,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-
dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-
cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as described by E or Z.



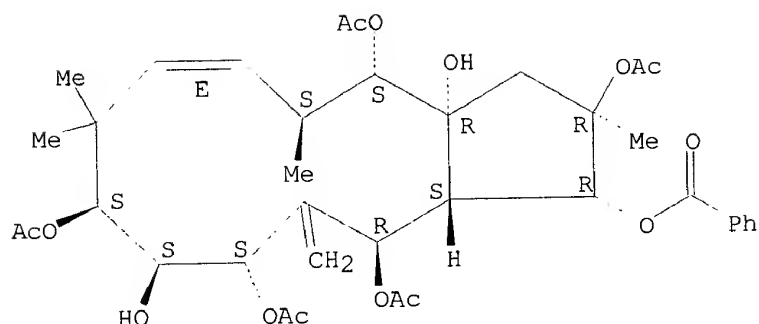
RN	210108-89-7	HCAPLUS
CN	3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,6,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)	

Absolute stereochemistry. Rotation (+).
Double bond geometry as described by E or Z.



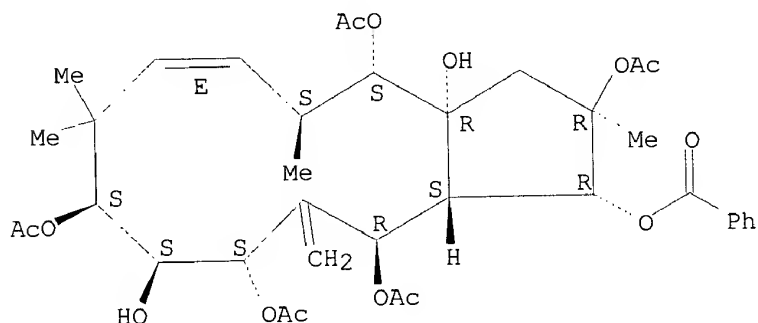
RN	210108-90-0	HCAPLUS
CN	3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol, 1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene- 1,2,4,9,11,13-pentaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13R, 13aS)- (9CI) (CA INDEX NAME)	

Absolute stereochemistry.
Double bond geometry as described by E or Z.



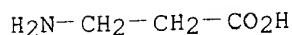
RN 210108-90-0 HCAPLUS
 CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,
 1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-
 , 2,4,9,11,13-pentaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13R,
 13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as described by E or Z.



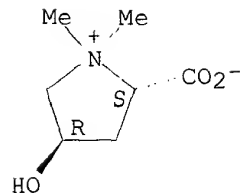
IT 107-95-9, .beta.-Alanine 515-25-3 590-46-5,
 Betaine hydrochloride
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (carrier; Euphorbiaceae macrocyclic diterpene for treatment of
 infection and PKC-related conditions)

RN 107-95-9 HCAPLUS
 CN .beta.-Alanine (6CI, 8CI, 9CI) (CA INDEX NAME)



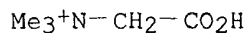
RN 515-25-3 HCAPLUS
 CN Pyrrolidinium, 2-carboxy-4-hydroxy-1,1-dimethyl-, inner salt, (2S,4R)-
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 590-46-5 HCAPLUS

CN Methanaminium, 1-carboxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

IC ICM A61K035-78
 ICS A61K031-455; A61K031-22; A61P031-02; G06F019-00
 CC 1-5 (Pharmacology)
 Section cross-reference(s): 63
 ST Euphorbiaceae macrocyclic diterpene antiinfective; PKC disease
 Euphorbiaceae macrocyclic diterpene
 IT Acalypha
 Acidoton
 Actinostemon
 Adelia
 Adenocline
 Adenocrepis
 Adenophaedra
 Adisca
 Agrostistachys
 Alchornea
 Alchorneopsis
 Alcinaeanthus
 Alcoceria
 Alcoholism
 Aleurites
 Amanoa
 Andrachne
 Angostyles
 Anisophyllum
 Anti-Alzheimer's agents
 Anti-infective agents
 Anti-inflammatory agents
 Anti-ischemic agents
 Antiarthritics
 Antiasthmatics
 Antibacterial agents
 Antidepressants
 Antidesma
 Antidiabetic agents
 Antihypertensives
 Antirheumatic agents
 Antiviral agents

Aphora
 Aporosa
 Aporosella
 Argythamnia
 Astrococcus
 Astrogyne
 Autoimmune disease
 Baccaurea
 Baliospermum
 Bernardia
 Beyeriosis
 Bischofia
 Blachia
 Blumeodondron
 Bonania
 Bradleia
 Breynia
 Breyniopsis
 Briedelia
 Buraeavia
 Caletia
 Caperonia
 Cardiovascular agents
 Caryodendron
 Celianella
 Cephalocroton
 Chaenotheca
 Chaetocarpus
 Cheilosa
 Chiropetalum
 Choriophyllum
 Cicca
 Cleidion
 Cleistanthus
 Clutia
 Cnesmone
 Cnidoscolus
 Coccoceras
 Codiaeum
 Coelodiscus
 Computer application
 Computer program
 Conami
 Conceveiba
 Conceveibastrum
 Conceveibum
 Corythea
 Croizatia
 Croton
 Crotonopsis
 Crozophora
 Cubanthus
 Cunuria
 Dactylostemon
 Dalechampia
 Dendrocousinsia
 Diasperus
 Didymocistus
 Dimorphocalyx
 Discocarpus

Ditaxis
Dodecastigma
Drug screening
Drypetes
Dysopsis
Elateriospermum
Endadenium
Endadenium gossweileri
Endospermum
Erismanthus
Erythrocarpus
Erythrochilus
Eumecanthus
Euphorbia
Euphorbia aaron-rossii
Euphorbia abbreviata
Euphorbia acuta
Euphorbia alatocaulis
Euphorbia albicaulis
Euphorbia albomarginata
Euphorbia alicae
Euphorbia alta
Euphorbia anacampseros
Euphorbia andromedae
Euphorbia angusta
Euphorbia anthonyi
Euphorbia antiguensis
Euphorbia apocynifolia
Euphorbia arabica
Euphorbia ariensis
Euphorbia arizonica
Euphorbia arkansana
Euphorbia arteagae
Euphorbia arundelana
Euphorbia astroites
Euphorbia atrococca
Euphorbia baselices
Euphorbia batabanensis
Euphorbia bergeri
Euphorbia bermudiana
Euphorbia bicolor
Euphorbia biformis
Euphorbia bifurcata
Euphorbia bilobata
Euphorbia biramensis
Euphorbia biuncialis
Euphorbia blepharostipula
Euphorbia blodgetti
Euphorbia boerhaavioides
Euphorbia boliviana
Euphorbia bracei
Euphorbia brachiata
Euphorbia brachycera
Euphorbia brandegeei
Euphorbia brittonii
Euphorbia caesia
Euphorbia calcicola
Euphorbia campestris
Euphorbia candelabrum
Euphorbia capitellata

Euphorbia carmenensis
Euphorbia carunculata
Euphorbia cayensis
Euphorbia celastroides
Euphorbia chalicophila
Euphorbia chamaerhodos
Euphorbia chamaesula
Euphorbia chiapensis
Euphorbia chiogenoides
Euphorbia cinerascens
Euphorbia clarionensis
Euphorbia colimae
Euphorbia colorata
Euphorbia commutata
Euphorbia consoquitlae
Euphorbia convolvuloides
Euphorbia corallifera
Euphorbia creberrima
Euphorbia crenulata
Euphorbia cubensis
Euphorbia cuspidata
Euphorbia cymbiformis
Euphorbia darlingtonii
Euphorbia defoliata
Euphorbia degeneri
Euphorbia deltoidea
Euphorbia dentata
Euphorbia depressa
Euphorbia dictyosperma
Euphorbia dioeca
Euphorbia discoidalis
Euphorbia dorsiventralis
Euphorbia drummondii
Euphorbia duclouxii
Euphorbia dussii
Euphorbia eanophylla
Euphorbia eggersii
Euphorbia eglandulosa
Euphorbia elata
Euphorbia enalla
Euphorbia eriogonoides
Euphorbia eriophylla
Euphorbia esculaeformis
Euphorbia espirituensis
Euphorbia esula
Euphorbia excisa
Euphorbia exclusiva
Euphorbia exstipitata
Euphorbia exstipulata
Euphorbia fendleri
Euphorbia filicaulis
Euphorbia filiformis
Euphorbia florida
Euphorbia fruticulosa
Euphorbia garberi
Euphorbia gaumerii
Euphorbia gerardiana
Euphorbia geyeri
Euphorbia glyptosperma
Euphorbia gorgonis

Euphorbia gracilior
 Euphorbia gracillima
 Euphorbia gradyi
 Euphorbia graminea
 Euphorbia graminea
 Euphorbia grisea
 Euphorbia guadalajarana
 Euphorbia guanarensis
 Euphorbia gymnadenia
 Euphorbia haematantha
 Euphorbia hedyotoides
 Euphorbia heldrichii
 Euphorbia helenae
 Euphorbia helleri
 Euphorbia helwigii
 Euphorbia henricksonii
 Euphorbia heterophylla
 Euphorbia hexagona
 Euphorbia hexagonoides
 Euphorbia hinkleyorum
 Euphorbia hintonii
 Euphorbia hirta
 Euphorbia hirtula
 Euphorbia hooveri
 Euphorbia humistrata
 Euphorbia hypericifolia
 Euphorbia inundata
 Euphorbia involuta
 Euphorbia jaliscensis
 Euphorbia jejuna
 Euphorbia johnstonii
 Euphorbia juttiae

(Euphorbiaceae macrocyclic diterpene for treatment of infection and
 PKC-related conditions)

IT Euphorbia knuthii
 Euphorbia lasiocarpa
 Euphorbia lata
 Euphorbia latazi
 Euphorbia latericolor
 Euphorbia laxiflora
 Euphorbia lecheoides
 Euphorbia ledienii
 Euphorbia leucophylla
 Euphorbia lineata
 Euphorbia linguiformis
 Euphorbia longecornuta
 Euphorbia longepetiolata
 Euphorbia longeramosa
 Euphorbia longinsulicola
 Euphorbia longipila
 Euphorbia lupulina
 Euphorbia lurida
 Euphorbia lycioides
 Euphorbia macropodoides
 Euphorbia macvaughiana
 Euphorbia manca
 Euphorbia mandoniana
 Euphorbia mangleti
 Euphorbia mango
 Euphorbia marylandica

Euphorbia mayana
Euphorbia melanadenia
Euphorbia melanocarpa
Euphorbia meridensis
Euphorbia mertonii
Euphorbia mexiae
Euphorbia microcephala
Euphorbia microclada
Euphorbia micromera
Euphorbia misella
Euphorbia missurica
Euphorbia montana
Euphorbia montereyana
Euphorbia multicaulis
Euphorbia multiformis
Euphorbia multinodis
Euphorbia multiseta
Euphorbia muscicola
Euphorbia neomexicana
Euphorbia nephradenia
Euphorbia niqueroana
Euphorbia oaxacana
Euphorbia occidentalis
Euphorbia odontodenia
Euphorbia olivacea
Euphorbia olowaluana
Euphorbia ophthalmica
Euphorbia ovata
Euphorbia pachypoda
Euphorbia pachyrhiza
Euphorbia padifolia
Euphorbia palmeri
Euphorbia paludicola
Euphorbia parishii
Euphorbia parryi
Euphorbia parviflora
Euphorbia paxiana
Euphorbia pediculifera
Euphorbia peplidion
Euphorbia peploides
Euphorbia peplus
Euphorbia pergamena
Euphorbia perlignea
Euphorbia petaloidea
Euphorbia petrina
Euphorbia picachensis
Euphorbia pilosula
Euphorbia pinariona
Euphorbia pinctorum
Euphorbia pionosperma
Euphorbia platysperma
Euphorbia plicata
Euphorbia poeppigii
Euphorbia poliosperma
Euphorbia polycarpa
Euphorbia polycnemoides
Euphorbia polyphylla
Euphorbia portoricensis
Euphorbia portulacoides
Euphorbia portulana

Euphorbia preslii
Euphorbia prostrata
Euphorbia pteroneura
Euphorbia pycnanthemum
Euphorbia ramosa
Euphorbia rapulum
Euphorbia remyi
Euphorbia retroscabra
Euphorbia revoluta
Euphorbia rivularis
Euphorbia robusta
Euphorbia rubida
Euphorbia rubrosperma
Euphorbia rupicola
Euphorbia sanmartensis
Euphorbia saxatilis
Euphorbia schizoloba
Euphorbia sclerocyathium
Euphorbia scopulorum
Euphorbia senilis
Euphorbia serpyllifolia
Euphorbia serrula
Euphorbia setiloba
Euphorbia sonora
Euphorbia soobyi
Euphorbia sparsiflora
Euphorbia sphaerosperma
Euphorbia spruceana
Euphorbia stellata
Euphorbia subcoerulea
Euphorbia submammularis
Euphorbia subpeltata
Euphorbia subpubens
Euphorbia subreniforme
Euphorbia subtrifoliata
Euphorbia succedanea
Euphorbia syphilitica
Euphorbia tamaulipasana
Euphorbia telephioides
Euphorbia tenuissima
Euphorbia tetrapora
Euphorbia tirucalli
Euphorbia tomentella
Euphorbia tomentosa
Euphorbia torralbasii
Euphorbia towarensis
Euphorbia trachysperma
Euphorbia tricolor
Euphorbia troyana
Euphorbia tuerckheimii
Euphorbia turczaninowii
Euphorbia umbellulata
Euphorbia undulata
Euphorbia vermiformis
Euphorbia versicolor
Euphorbia villifera
Euphorbia violacea
Euphorbia whitei
Euphorbia xanti
Euphorbia xylopoda

Euphorbia yayalesia
Euphorbia yungasensis
Euphorbia zeravschanica
Euphorbia zinniiflora
Euphorbiaceae
Euphorbiodendron
Excoecaria
Fluggea
Garcia
Gavarretia
Gelonium
Givotia
Glochidion
Glochidionopsis
Glycydendron
Gymnanthes
Gymnosporia
Haematospermum
Hendecandras
Hevea
Hieronima
Hippocrepantha
Homalanthus
Human herpesvirus 4
Human immunodeficiency virus 1
Hymenocardia
Immunostimulants
Janipha
Jatropha
Julocroton
Lasiocroton
Leiocarpus
Leonardia
Lepidanthus
Leucocroton
Leukocyte
Mabea
Macaranga
Macrocroton
Mallotus (plant)
Manihot
Mappa
Maprounea
Melanthesa
Mercurialis
Mettenia
Micrandra
Microdesmis
Microelus
Microstachys
Monadenium
Monadenium guentheri
Monadenium lugardae
Mononuclear cell (leukocyte)
Mozinna
Neoscortechinia
Neutrophil
Omalthus
Omphalea
Ophellantha

Orbicularia
 Ostodes
 Oxydectes
 Palenga
 Pantadenia
 Paradrypetes
 Pausandra
 Pedilanthus
 Pera
 Peridium
 Pétalostigma
 Phagocytosis
 Phyllanthus
 Picrodendron
 Pierardia
 Pilinophytum
 Pimeleodendron
 Piranhea
 Platygyne
 Plukenetia
 Podocalyx
 Poinsettia
 Poraresia
 Prosartema
 Pseudanthus
 Psoriasis
 Pycnocomma
 Quadrasia
 Reverchonia
 Richeria
 Richeriella
 Ricinella
 Ricinocarpos
 Rottlera
 Sagotia
 Sandwithia
 Sapium
 Savia

(Euphorbiaceae macrocyclic diterpene for treatment of infection and
 PKC-related conditions)

IT Sclerocroton
 Sebastiania
 Securinega
 Senefeldera
 Senefelderopsis
 Serophyton
 Siphonia
 Spathiostemon
 Spixia
 Stillingia
 Strophoblachia
 Synadenium
 Synadenium compactum
 Synadenium grantii
 Tetracoccus
 Tetraplandra
 Tetrorchidium
 Thyrsanthera
 Tithymalus
 Tragia

- Transplant and Transplantation
- Trewia
- Trigonostemon
- Tyria
- Xylophylla
 - (Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Promoter (genetic element)
 - RL: BSU (Biological study, unclassified); BIOL (Biological study)
 - (Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Diterpenes
 - Macrocyclic compounds
 - RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
 - (Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Antiarteriosclerotics
 - (antiatherosclerotics; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Dermatitis
 - (atopic; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Respiration, animal
 - (burst; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Ovary, neoplasm
 - (carcinoma, inhibitors; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Blood
 - (disease; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Diterpenes
 - RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
 - (esters; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Gene
 - RL: BSU (Biological study, unclassified); BIOL (Biological study)
 - (expression, PKC-dependent; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Skin, disease
 - (hyperplastic dermatosis; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Heart, disease
 - (hypertrophy; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Biological transport
 - (intracellular, PKC; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Heart, disease
 - (ischemia; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Virus
 - (latent; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Mental disorder
 - (manic bipolar disorder; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Antitumor agents

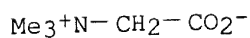
- (melanoma; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Lymphocyte
(natural killer cell; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Antitumor agents
(ovary carcinoma; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Cytomegalovirus
(promoter; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Multiple sclerosis
(therapeutic agents; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Drug delivery systems
(tinctures, tincture; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Cell differentiation
(to bipolar dendritic phenotype; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT Drug delivery systems
(topical; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT 16561-29-8, Pma 37558-16-0, Phorbol dibutyrate
141436-78-4, Protein kinase C
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT 67707-88-4, Ingenane 67707-88-4D,
Ingenane, derivs. 75567-37-2 82425-35-2
210108-85-3, Jatrophone 1 210108-85-3D, Jatrophone 1,
derivs. 210108-86-4, Jatrophone 2 210108-86-4D,
Jatrophone 2, derivs. 210108-87-5, Jatrophone 3
210108-87-5D, Jatrophone 3, derivs. 210108-88-6,
Jatrophone 4 210108-88-6D, Jatrophone 4, derivs.
210108-89-7, Jatrophone 5 210108-89-7D, Jatrophone 5,
derivs. 210108-90-0, Jatrophone 6 210108-90-0D,
Jatrophone 6, derivs.
RL: NPO (Natural product occurrence); PAC (Pharmacological activity); THU
(Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)
- IT 107-95-9, .beta.-Alanine 515-25-3 590-46-5,
Betaine hydrochloride
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(carrier; Euphorbiaceae macrocyclic diterpene for treatment of infection and PKC-related conditions)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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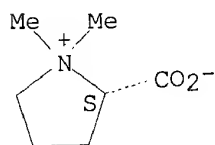
L4 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2002 ACS
 ACCESSION NUMBER: 1999:136872 HCAPLUS
 DOCUMENT NUMBER: 130:205113
 TITLE: Anticancer compounds from Euphorbia
 INVENTOR(S): Aylward, James Harrison
 PATENT ASSIGNEE(S): Peplin Pty. Ltd., Australia
 SOURCE: PCT Int. Appl., 92 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9908994	A1	19990225	WO 1998-AU656	19980819
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2301082	AA	19990225	CA 1998-2301082	19980819
AU 9887217	A1	19990308	AU 1998-87217	19980819
AU 736230	B2	20010726		
EP 1015413	A1	20000705	EP 1998-938534	19980819
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9811327	A	20000919	BR 1998-11327	19980819
JP 2001515059	T2	20010918	JP 2000-509681	19980819
US 2001051644	A1	20011213	US 2001-888997	20010621
PRIORITY APPLN. INFO.:				
			AU 1997-8640	A 19970819
			WO 1998-AU656	W 19980819
			US 2000-486199	A3 20000728
AB	The invention relates to a compd. or group of compds. present in an active principle derived from plants of the species Euphorbia peplus, Euphorbia hirta, and Euphorbia drummondii, and to pharmaceutical compns. comprising these compds. Exts. from these plants have been found to show selective cytotoxicity against several different cancer cell lines. The compds. are useful in effective treatment of cancers, particularly malignant melanomas and squamous cell carcinomas. In a preferred embodiment, the compd. is selected from jatrophanes, pepluanes, paralianes and ingenanes, and pharmaceutically-acceptable salts or esters thereof, and more particularly jatrophanes of Conformation II.			
IT	107-43-7, Glycine betaine 471-87-4, Stachydrine 475-11-6, N-Methylproline 515-25-3 4252-82-8 6340-41-6 220941-15-1			
	RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (anticancer compds. from Euphorbia)			
RN	107-43-7 HCAPLUS			
CN	Methanaminium, 1-carboxy-N,N,N-trimethyl-, inner salt (9CI) (CA INDEX NAME)			



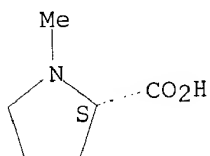
RN 471-87-4 HCAPLUS
 CN Pyrrolidinium, 2-carboxy-1,1-dimethyl-, inner salt, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



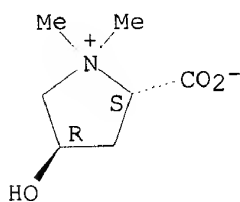
RN 475-11-6 HCAPLUS
 CN L-Proline, 1-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



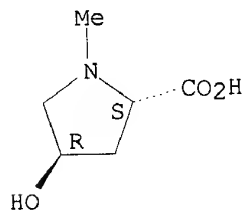
RN 515-25-3 HCAPLUS
 CN Pyrrolidinium, 2-carboxy-4-hydroxy-1,1-dimethyl-, inner salt, (2S,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



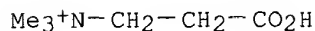
RN 4252-82-8 HCAPLUS
 CN L-Proline, 4-hydroxy-1-methyl-, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 6340-41-6 HCAPLUS

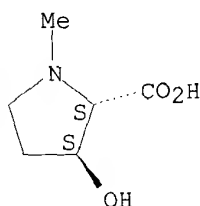
CN Ethanaminium, 2-carboxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



RN 220941-15-1 HCAPLUS

CN L-Proline, 3-hydroxy-1-methyl-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 64280-37-1P 210108-85-3P, Jatrophane 1

210108-86-4P, Jatrophane 2 210108-87-5P, Jatrophane 3

210108-88-6P, Jatrophane 4 210108-89-7P, Jatrophane 5

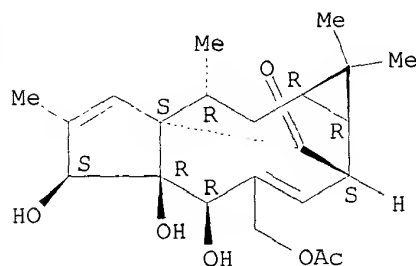
210108-90-0P, Jatrophane 6 210108-91-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(anticancer compds. from Euphorbia)

RN 64280-37-1 HCAPLUS

CN 1H-2,8a-Methanocyclopenta[a]cyclopropa[e]cyclododecen-11-one,
4-[(acetyloxy)methyl]-1a,2,5,5a,6,9,10,10a-octahydro-5,5a,6-trihydroxy-
1,1,7,9-tetramethyl-, (1aR,2S,5R,5aR,6S,8a1S,9R,10aR)- (9CI) (CA INDEX NAME)

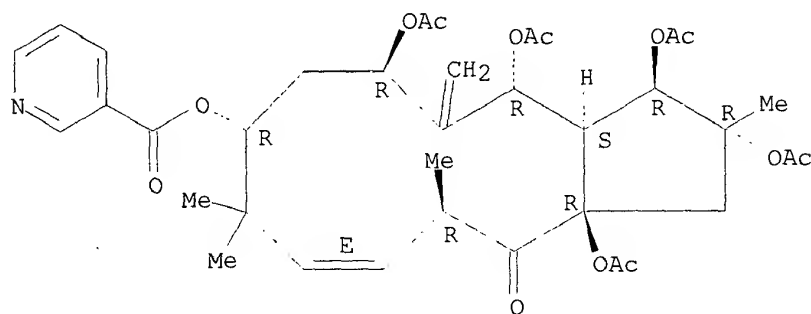
Absolute stereochemistry.



RN 210108-85-3 HCAPLUS

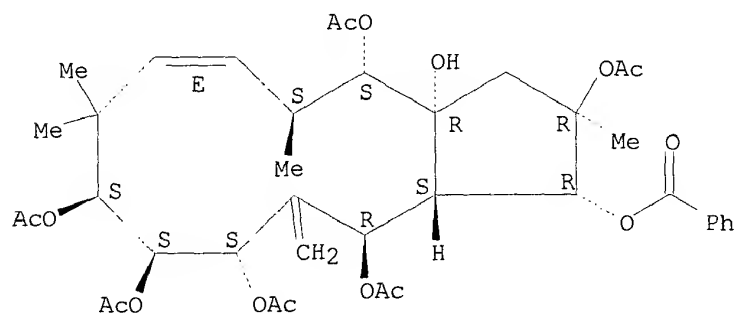
CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6R,8R,10E,12R,13aR)-2,3,4,6,13a-pentakis(acetyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-2,9,9,12-tetramethyl-5-methylene-13-oxo-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as described by E or Z.



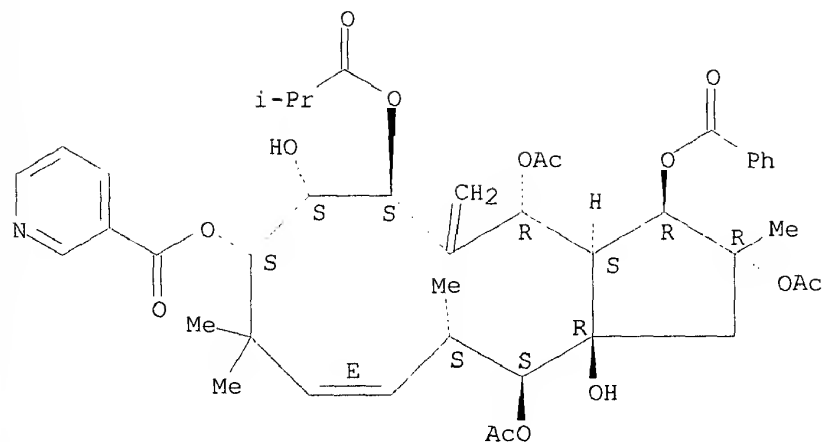
RN 210108-86-4 HCAPLUS
CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,
1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-
2,4,9,10,11,13-hexaacetate 1-benzoate (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13
R,13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as described by E or Z.



RN	210108-87-5	HCAPLUS
CN	3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-2,4,13-tris(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-6-(2-methyl-1-oxopropoxy)-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)	

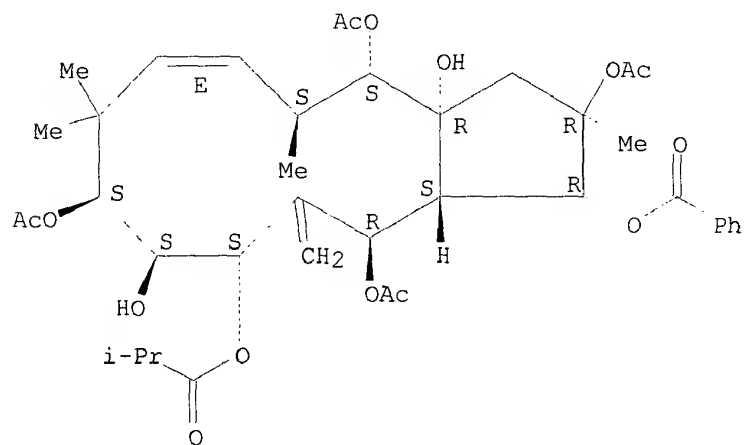
Absolute stereochemistry. Rotation (+).
Double bond geometry as described by E or Z.



RN 210108-88-6 HCAPLUS

CN Propanoic acid, 2-methyl-, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-
2,4,8,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-
dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-
cyclopentacyclododecen-6-yl ester (9CI) (CA INDEX NAME)

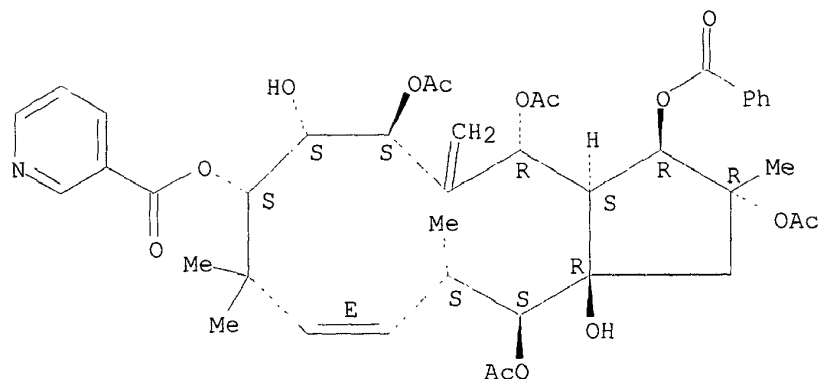
Absolute stereochemistry. Rotation (+).
Double bond geometry as described by E or Z.



RN 210108-89-7 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,12S,13S,13aR)-
2,4,6,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-
dodecahydro-7,13a-dihydroxy-2,9,9,12-tetramethyl-5-methylene-1H-
cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
Double bond geometry as described by E or Z.

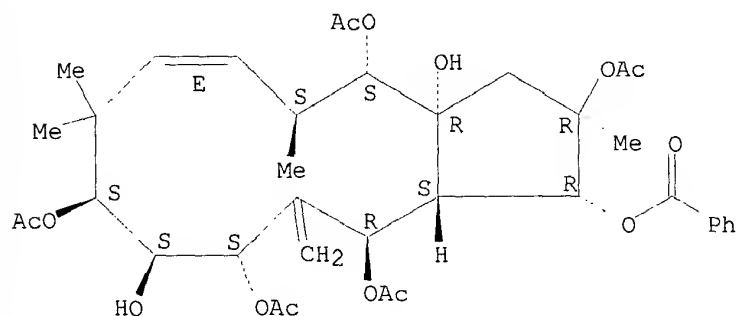


RN 210108-90-0 HCAPLUS

CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol,
1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,5,8,8-tetramethyl-12-methylene-
, 2,4,9,11,13-pentaacetate 1-benzoate, (1R,2R,3aR,4S,5S,6E,9S,10S,11S,13R,
13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

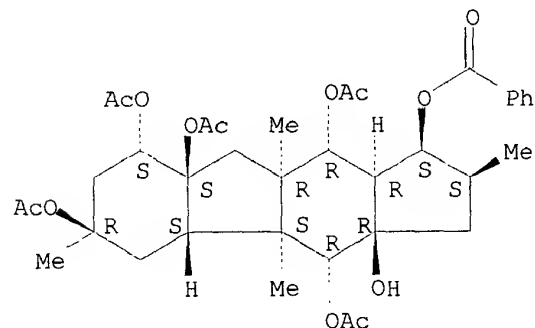
Double bond geometry as described by E or Z.



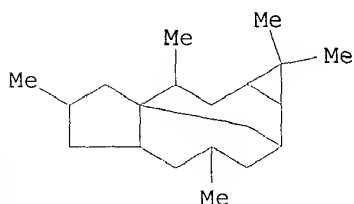
RN 210108-91-1 HCAPLUS

CN Cyclopenta[b]fluorene-1,3a,4,6,8,8a,10(1H,4H)-heptol, dodecahydro-
2,4a,6,9a-tetramethyl-, 4,6,8,8a,10-pentaacetate 1-benzoate,
(1S,2S,3aR,4R,4aS,4bS,6R,8R,8aR,9aR,10R,10aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

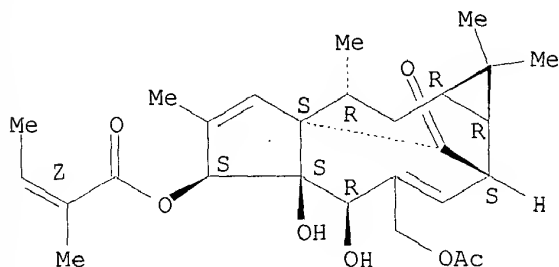


IT 67707-88-4, Ingenane 82425-35-2
 82425-35-2D, esters 210108-91-1D, esters
 220941-16-2D, esters 220941-18-4D, esters
 220941-19-5D, esters 220941-20-8D, esters
 220941-21-9D, esters 220941-22-0D, esters
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (anticancer compds. from Euphorbia)
 RN 67707-88-4 HCAPLUS
 CN 1H-2,8a-Methanocyclopenta[a]cyclopropa[e]cyclodecene, dodecahydro-1,1,4,7,9-pentamethyl-, (1aS,2R,4R,5aR,7R,8aR,9R,10aR)- (9CI) (CA INDEX NAME)



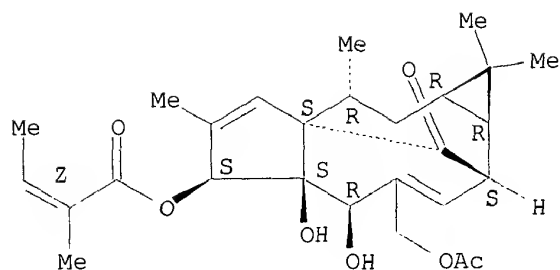
RN 82425-35-2 HCAPLUS
 CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-4-[(acetyloxy)methyl]-1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-1,1,7,9-tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-yl ester, (2Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).
 Double bond geometry as shown.



RN 82425-35-2 HCAPLUS
 CN 2-Butenoic acid, 2-methyl-, (1aR,2S,5R,5aS,6S,8aS,9R,10aR)-4-[(acetyloxy)methyl]-1a,2,5,5a,6,9,10,10a-octahydro-5,5a-dihydroxy-1,1,7,9-tetramethyl-11-oxo-1H-2,8a-methanocyclopenta[a]cyclopropa[e]cyclodecen-6-yl ester, (2Z)- (9CI) (CA INDEX NAME)

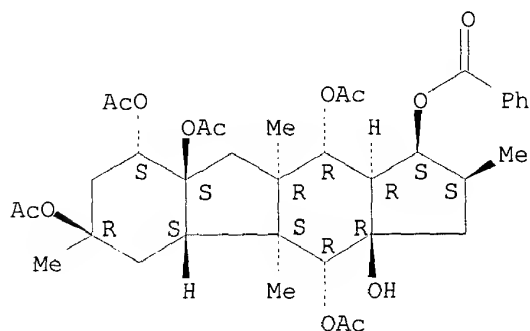
Absolute stereochemistry. Rotation (+).
 Double bond geometry as shown.



RN 210108-91-1 HCAPLUS

CN Cyclopenta[b]fluorene-1,3a,4,6,8,8a,10(1H,4H)-heptol, dodecahydro-
2,4a,6,9a-tetramethyl-, 4,6,8,8a,10-pentaacetate 1-benzoate,
(1S,2S,3aR,4R,4aS,4bS,6R,8R,8aR,9aR,10R,10aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

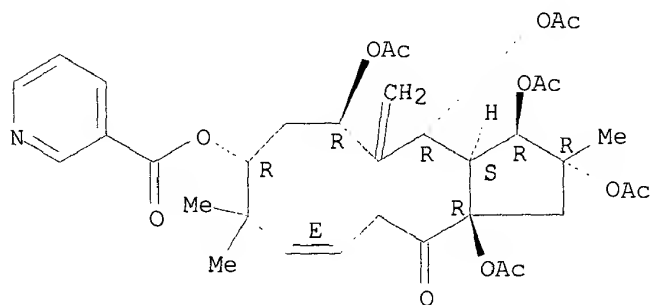


RN 220941-16-2 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6R,8R,10E,13aR)-2,3,4,6,13a-
pentakis(acetyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-2,9,9-
trimethyl-5-methylene-13-oxo-1H-cyclopentacyclododecen-8-yl ester (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as described by E or Z.



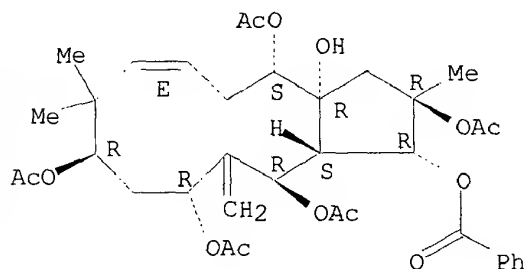
RN 220941-18-4 HCAPLUS

CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,11,13-heptol,
1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,8,8-trimethyl-12-methylene-,
2,4,9,11,13-pentaacetate 1-benzoate, (1R,2R,3aR,4S,6E,9R,11R,13R,13aS)-

(9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as described by E or Z.

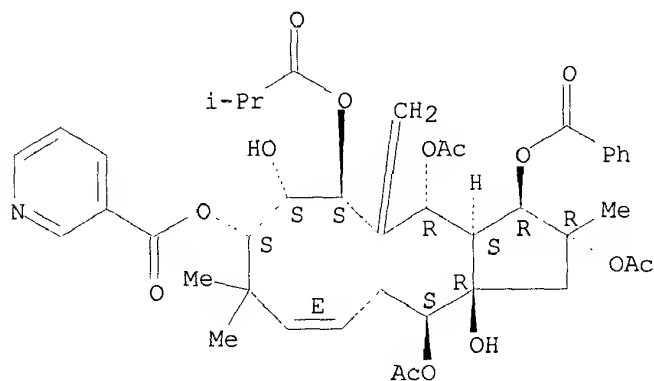


RN 220941-19-5 HCAPLUS

CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,13S,13aR)-2,4,13-tris(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9-trimethyl-5-methylene-6-(2-methyl-1-oxopropoxy)-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as described by E or Z.

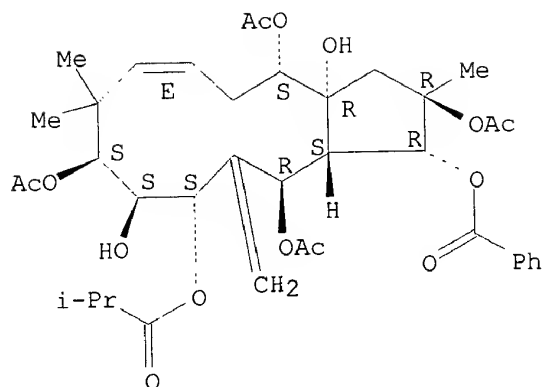


RN 220941-20-8 HCAPLUS

CN Propanoic acid, 2-methyl-, (2R,3R,3aS,4R,6S,7S,8S,10E,13S,13aR)-2,4,8,13-tetrakis(acetyloxy)-3-(benzoyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9-trimethyl-5-methylene-1H-cyclopentacyclododecen-6-yl ester (9CI) (CA INDEX NAME)

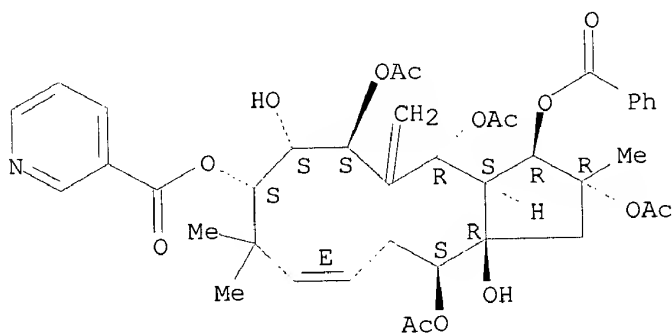
Absolute stereochemistry.

Double bond geometry as described by E or Z.



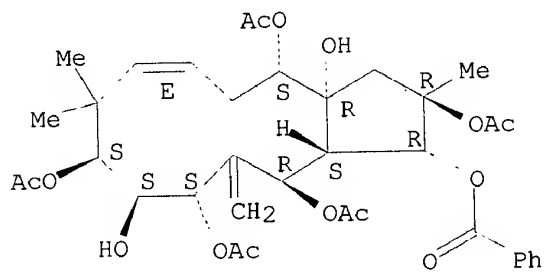
RN 220941-21-9 HCAPLUS
 CN 3-Pyridinecarboxylic acid, (2R,3R,3aS,4R,6S,7S,8S,10E,13S,13aR)-2,4,6,13-tetrakis(acetyloxy)-3-(benzyloxy)-2,3,3a,4,5,6,7,8,9,12,13,13a-dodecahydro-7,13a-dihydroxy-2,9,9-trimethyl-5-methylene-1H-cyclopentacyclododecen-8-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as described by E or Z.



RN 220941-22-0 HCAPLUS
 CN 3aH-Cyclopentacyclododecene-1,2,3a,4,9,10,11,13-octol, 1,2,3,4,5,8,9,10,11,12,13,13a-dodecahydro-2,8,8-trimethyl-12-methylene-, 2,4,9,11,13-pentaacetate 1-benzoate, (1R,2R,3aR,4S,6E,9S,10S,11S,13R,13aS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as described by E or Z.



IT 9001-87-0, Phospholipase D 9075-81-4, Sialyltransferase
 151185-16-9, Fibroblast growth factor 9
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (gene; anticancer compds. from Euphorbia)
 RN 9001-87-0 HCAPLUS
 CN Phospholipase D (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 9075-81-4 HCAPLUS
 CN Sialyltransferase, cytidine monophosphoacetylneuraminate-
 galactosylglycoprotein (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 151185-16-9 HCAPLUS
 CN Fibroblast growth factor 9 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 10028-15-6, Ozone, biological studies
 RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
 (skin damage from exposure to; anticancer compds. from Euphorbia)
 RN 10028-15-6 HCAPLUS
 CN Ozone (8CI, 9CI) (CA INDEX NAME)

O-O-O

IT 141436-78-4, Protein kinase C
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (zeta, gene; anticancer compds. from Euphorbia)
 RN 141436-78-4 HCAPLUS
 CN Kinase (phosphorylating), protein, C (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IC ICM C07C069-78
 ICS C07C069-533; C07D213-80; C07G017-00; A61K035-78; A61K031-455;
 A61K031-22; A61K031-325
 CC 1-6 (Pharmacology)
 Section cross-reference(s): 11, 63
 ST Euphorbia antitumor agent; melanoma squamous cell carcinoma Euphorbia
 compd; jatrophane pepluane paraliane ingenane Euphorbia
 antitumor
 IT Growth factors, animal
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (80H-K, gene; anticancer compds. from Euphorbia)
 IT Animal cell line
 (A549; anticancer compds. from Euphorbia)
 IT Cyclophilins
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (B, gene; anticancer compds. from Euphorbia)
 IT Animal cell line
 (B16; anticancer compds. from Euphorbia)
 IT Animal cell line
 (Colo16; anticancer compds. from Euphorbia)
 IT DNA
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (DNA-damaging agents, adjuvant to; anticancer compds. from Euphorbia)
 IT Proteins, specific or class
 RL: BSU (Biological study, unclassified); BIOL (Biological study)

(GADD45, gene; anticancer compds. from Euphorbia)

IT Heat-shock proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(HSP 27, gene; anticancer compds. from Euphorbia)

IT Profilins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(II, gene; anticancer compds. from Euphorbia)

IT Proteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(LAMP7-E1, gene; anticancer compds. from Euphorbia)

IT Animal cell line
(LIM1215; anticancer compds. from Euphorbia)

IT Animal cell line
(MCC16; anticancer compds. from Euphorbia)

IT Animal cell line
(MCF-7; anticancer compds. from Euphorbia)

IT Histocompatibility antigens
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(MHC (major histocompatibility complex), class I, gene; anticancer compds. from Euphorbia)

IT Animal cell line
(MM2058; anticancer compds. from Euphorbia)

IT Animal cell line
(MM220; anticancer compds. from Euphorbia)

IT Animal cell line
(MM229; anticancer compds. from Euphorbia)

IT Animal cell line
(MM537; anticancer compds. from Euphorbia)

IT Animal cell line
(MM96L; anticancer compds. from Euphorbia)

IT Skin
Skin
(Merkel cell, Merkel cell carcinoma inhibitors; anticancer compds. from Euphorbia)

IT Proteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(P58, XP group C, gene; anticancer compds. from Euphorbia)

IT Cell proliferation
(T cell; anticancer compds. from Euphorbia)

IT Proteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Wilm's tumor-related protein, gene; anticancer compds. from Euphorbia)

IT Proteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(XP group C HHR2, gene; anticancer compds. from Euphorbia)

IT Keratosis
(actinic; anticancer compds. from Euphorbia)

IT Radiotherapy
(adjuvant to; anticancer compds. from Euphorbia)

IT Antitumor agents
Cell proliferation
Drug delivery systems
Euphorbia
Euphorbia drummondii
Euphorbia hirta
Euphorbia peplus
HeLa cell
Immunostimulants
Radioprotectants
(anticancer compds. from Euphorbia)

IT Skin, neoplasm
 Skin, neoplasm
 (basal cell carcinoma, inhibitors; anticancer compds. from Euphorbia)

IT Antitumor agents
 Antitumor agents
 (basal cell carcinoma; anticancer compds. from Euphorbia)

IT Antitumor agents
 (carcinoma, Merkel cell; anticancer compds. from Euphorbia)

IT Uterus, neoplasm
 (cervix, inhibitors; anticancer compds. from Euphorbia)

IT Antitumor agents
 (cervix; anticancer compds. from Euphorbia)

IT Phosphoproteins
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (cofilins, gene; anticancer compds. from Euphorbia)

IT Intestine, neoplasm
 (colon, inhibitors; anticancer compds. from Euphorbia)

IT Antitumor agents
 (colon; anticancer compds. from Euphorbia)

IT Skin, disease
 (damage; anticancer compds. from Euphorbia)

IT Metallothioneins
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (gene, activation; anticancer compds. from Euphorbia)

IT G proteins (guanine nucleotide-binding proteins)
 Granulocyte colony-stimulating factor receptors
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (gene; anticancer compds. from Euphorbia)

IT Heat-shock proteins
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (hsp 28, gene; anticancer compds. from Euphorbia)

IT Cell differentiation
 (inducers; anticancer compds. from Euphorbia)

IT Lung, neoplasm
 Skin, neoplasm
 Skin, neoplasm
 (inhibitors; anticancer compds. from Euphorbia)

IT Proteins, specific or class
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (ionizing radiation resistance (DAP3), gene; anticancer compds. from Euphorbia)

IT Antitumor agents
 (lung; anticancer compds. from Euphorbia)

IT Antitumor agents
 (mammary gland; anticancer compds. from Euphorbia)

IT Antitumor agents
 (melanoma; anticancer compds. from Euphorbia)

IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (metallothionein, activation; anticancer compds. from Euphorbia)

IT Mammary gland
 (neoplasm, inhibitors; anticancer compds. from Euphorbia)

IT Gene, animal
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 (oncogene, TAX; anticancer compds. from Euphorbia)

IT Melanocyte
 (proliferation induction; anticancer compds. from Euphorbia)

IT T cell (lymphocyte)

- (proliferation; anticancer compds. from Euphorbia)
- IT Proteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(retinol-binding, 1, gene; anticancer compds. from Euphorbia)
- IT Ionizing radiation
Microwave
UV radiation
(skin damage from; anticancer compds. from Euphorbia)
- IT Antitumor agents
(skin squamous cell carcinoma; anticancer compds. from Euphorbia)
- IT Antitumor agents
Antitumor agents
(skin; anticancer compds. from Euphorbia)
- IT Proteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(small G protein TTF, gene; anticancer compds. from Euphorbia)
- IT Antitumor agents
(solid tumor; anticancer compds. from Euphorbia)
- IT Skin, neoplasm
(squamous cell carcinoma, inhibitors; anticancer compds. from Euphorbia)
- IT Antitumor agents
(squamous cell carcinoma; anticancer compds. from Euphorbia)
- IT Tubulins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(.alpha. kl, gene; anticancer compds. from Euphorbia)
- IT Proteins, specific or class
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(.beta.-polypeptide 3, gene; anticancer compds. from Euphorbia)
- IT 107-43-7, Glycine betaine 471-87-4, Stachydrine
475-11-6, N-Methylproline 515-25-3 4252-82-8
6340-41-6 220941-15-1
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(anticancer compds. from Euphorbia)
- IT 64280-37-1P 210108-85-3P, Jatrophane 1
210108-86-4P, Jatrophane 2 210108-87-5P, Jatrophane 3
210108-88-6P, Jatrophane 4 210108-89-7P, Jatrophane 5
210108-90-0P, Jatrophane 6 210108-91-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(anticancer compds. from Euphorbia)
- IT 67707-88-4, Ingenane 82425-35-2
82425-35-2D, esters 210108-91-1D, esters
220941-16-2D, esters 220941-18-4D, esters
220941-19-5D, esters 220941-20-8D, esters
220941-21-9D, esters 220941-22-0D, esters
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anticancer compds. from Euphorbia)
- IT 9001-87-0, Phospholipase D 9075-81-4, Sialyltransferase
151185-16-9, Fibroblast growth factor 9
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(gene; anticancer compds. from Euphorbia)
- IT 10028-15-6, Ozone, biological studies
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
(skin damage from exposure to; anticancer compds. from Euphorbia)
- IT 141436-78-4, Protein kinase C

TATE 09/888,997

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(zeta, gene; anticancer compds. from Euphorbia)
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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Patent and Trademark Office

80861

Att: Susan Hanley
SEARCH REQUEST FORM

Examiner, # (Mandatory): 73510 Requester's Full Name: Chris TateArt Unit 1654 Location (Bldg/Room#): CM1 11B09 Phone (circle 305) 306 308 7114Serial Number: 09/888,178 and 09/888,997 Results Format Preferred (circle): PAPER DISK E-MAILTitle of Invention methods of stimulating the immune systemInventors (please provide full names): James H. Aylward (Australia)Earliest Priority Date: 8/1998

Keywords (include any known synonyms registry numbers, explanation of initialisms):

immunostimula?
 boost the immune system
 enhance? immuno?
 etc.

Point of Contact:
 Susan Hanley
 Technical Info. Specialist
 CM1 6B05 Tel: 305-4053

At my request
 Susan Hanley
 Also searched
 the below compounds
 for anti-cancer
 activity → see
 09/888,178

Search Topic:

Please write detailed statement of the search topic, and the concept of the invention. Describe as specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples of relevant citations, authors, etc., if known. You may include a copy of the abstract and the broadcast or most relevant claim(s).

Please search the compounds (ingenane derivatives)
 of clms 74-77 with respect to those
 that stimulate the immune system
 (doesn't matter where compound
 is derived from as recited in clm 33) - Thanks

STAFF USE ONLYSearcher: Hanley

Searcher Phone #: _____

Searcher Location: _____

Date Picked Up: _____

Date Completed: 11/21Clerical Prep Time: 60Terminal Time: 8585

Number of Databases: _____

Type of Search

____ N.A. Sequence

____ A.A. Sequence

____ 1 Structure (#)

____ Bibliographic

____ Litigation I

____ Fulltext

____ Procurement

____ Other

Vendors (include cost where applicable)736 STN

____ Questel/Orbit

____ Lexis/Nexis

____ WWW/Internet

____ In-house sequence systems (list)

____ Dialog

____ Dr. Link

____ Westlaw

____ Other (specify)

Tate, Christopher

From: Hanley, Susan
Sent: Wednesday, November 13, 2002 11:33 AM
To: Tate, Christopher
Subject: call follow-up

also search for
treating cancer

Hi Chris,

I got your phone message regarding 09/888,997. No problem. I will include the method of treating in the search.

I had planned to do this search next week Is that still OK? Sorry that I did not respond earlier but I've been out since Friday with

the cold from hell.

Susan

09/888, 997

Applicant : James Harris Aylward
Serial No. : to be assigned
Filed : June 21, 2001
Page : 2

ney's Docket No.: 07404-003001

AMENDMENT

Please amend the above-captioned application as follows:

In The Specification:

Please amend the specification as follows.

Replace the title as filed with the following new title:

A1 --METHODS OF STIMULATING THE IMMUNE SYSTEM--

On page 1, after the title on line 1, under the heading, insert:

A2 --CROSS-REFERENCES TO RELATED APPLICATIONS

09/888, 997
The present application is a divisional application of United States Patent Application Serial No. (USSN) 09/486,199, filed February 22, 2000, now pending, which was filed under 35 U.S.C. §371 based on PCT/AU98/00656, filed on August 19, 1998, which claims the benefit of priority to Australian Application No. PO-8640, filed August 19, 1997. These applications are explicitly incorporated herein by reference in their entirety and for all purposes.--

In The Claims:

A3 Please cancel claims 1 to 32, without prejudice.

Please add the following new claims:

A4 --33. A method of stimulating the immune system, the method comprising administering to ^{LAB}the subject an effective amount of a compound, wherein the compound is derived from an extract from the sap of a species of *Euphorbia*, wherein the compound

(a) is extractable from the *Euphorbia* sap in the presence of about 95% v/w ethanol,

(b) has cell inhibiting or retarding activity which is neither destroyed by acetone nor by heating at about 95°C for about 15 minutes, and

from
the
comps
recited
in
clms.
74-77

74. The method of claim 33, wherein the compound comprises a composition selected from the group consisting of a angeloyl-substituted ingenane, a angeloyl-substituted ingenane derivative and a pharmaceutically acceptable salt of a angeloyl-substituted ingenane or a angeloyl-substituted ingenane derivative.

75. The method of claim 74, wherein the angeloyl-substituted ingenane derivative comprises an ester derivative.

76. The method of claim 74, wherein the angeloyl-substituted ingenane derivative comprises an acetylated derivative.

77. The method of claim 74, wherein angeloyl-substituted ingenane is selected from the group consisting of a 20-O-acetyl-ingenol-3-angelate, an acetylated derivative of a 20-O-acetyl-ingenol-3-angelate and an ester derivative of a 20-O-acetyl-ingenol-3-angelate.

78. A method of stimulating the immune system, the method comprising administering to the subject an effective amount of at least two compounds,

wherein the two compounds are derived from an extract from the sap of a species of *Euphorbia*, wherein the compounds

(a) are extractable from the *Euphorbia* sap in the presence of about 95% v/w ethanol,

(b) have cell inhibiting or retarding activity which is neither destroyed by acetone nor by heating at about 95°C for about 15 minutes, and

(c) are capable of inhibiting the growth of at least one cell line selected from the group consisting of MM96L, MM229, MM220, MM537, MM2058, HeLa, B16, LIM1215, A549, MCF7, MCC16 and Colo16.

79. The method of claim 78, wherein the compounds are selected from the group consisting of a jatrophone, a jatrophone derivative, a pharmaceutically acceptable salt of a

100-290-165333